

OPERATOR: **Bill Barrett Corp**

WELL NAME: **AEF 4-62-16-0857CH**

FIELD NAME: Wattenberg

DRILLING RIG: Nabors M37

API #: 05-123-39087

SCALE: 5"=100'

SURFACE HOLE: 250 FNL, 1003 FEL

BOTTOM HOLE: 500 FSL, 500 FEL

LOCATION: NENE Sec 16, T4N, R62W



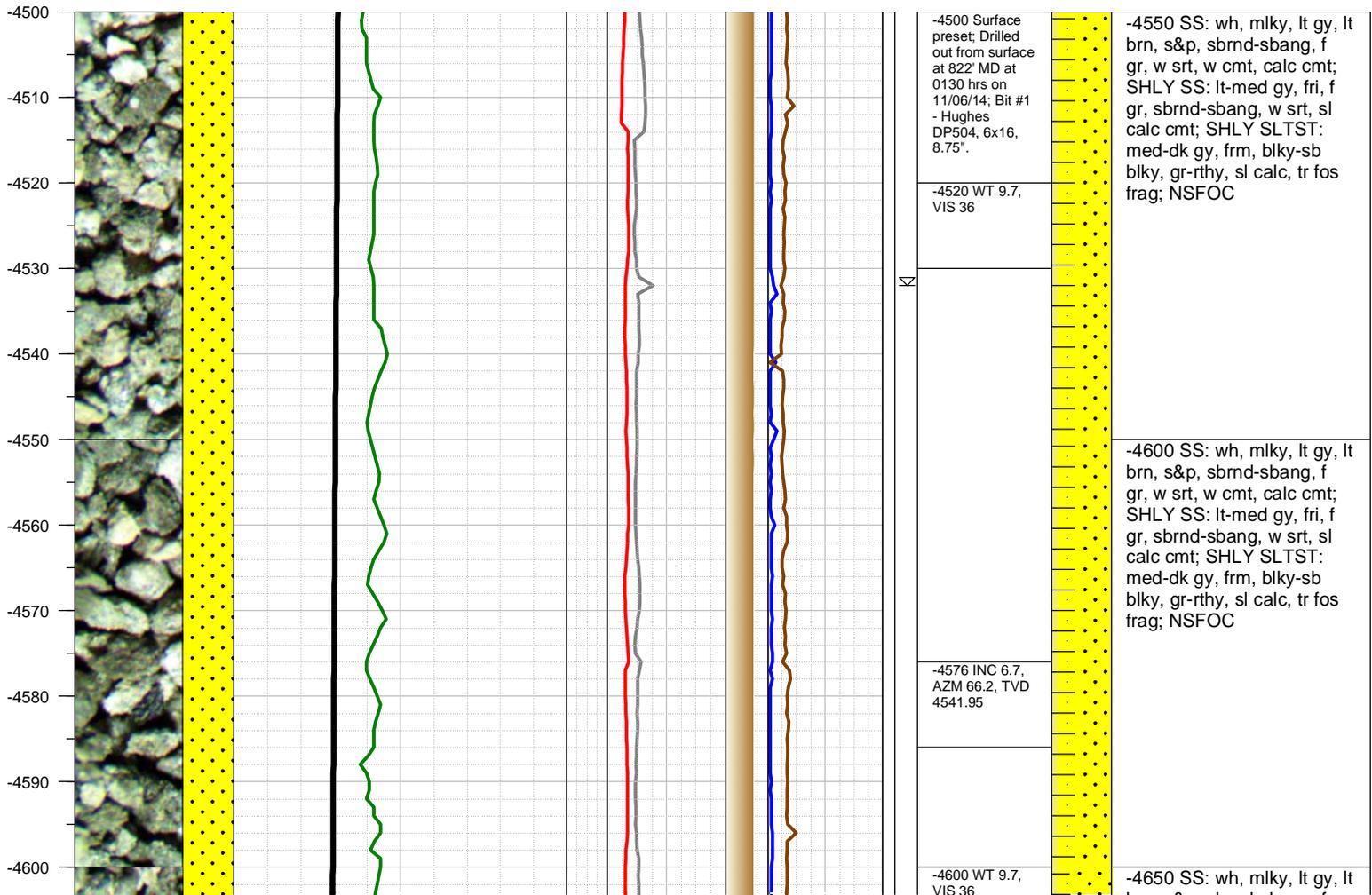
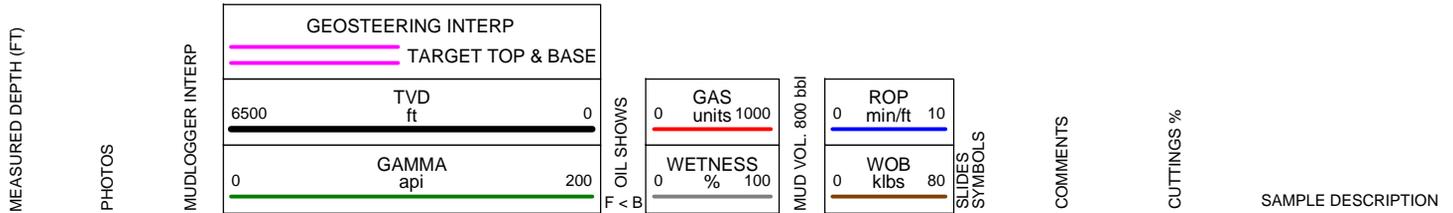
Earth Science Agency, LLC

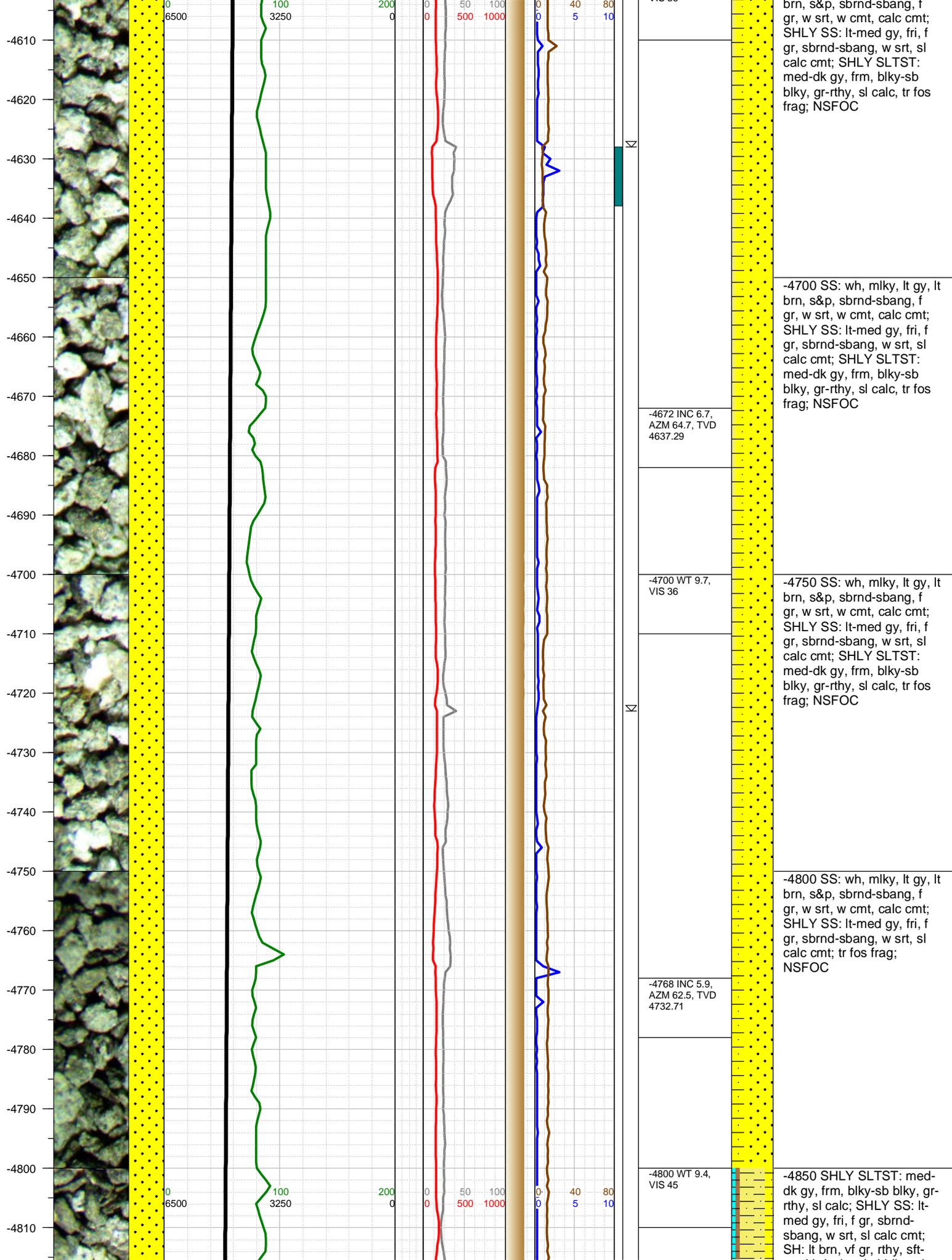
COUNTY: Weld  
 STATE: Colorado  
 GROUND ELEVATION: 4523'  
 KELLY BUSHING: 4546'  
 DRILLING FLUID: LSND  
 TVD VS. MD: 6213.79/10805'  
 SPUD DATE: November 6, 2014  
 FGS BEGIN LOGGING: 4500'; November 6, 2014  
 TD DATE: November 12, 2014  
 DATES LOGGED: November 6, 2014 - November 12, 2014  
 DEPTHS LOGGED: 4500'-10805'  
 LOGGER: Tyson Barnes

**LEGEND**

	CHALK		SHALE
	LIMESTONE		SILTY SHALE
	SHALY LIMESTONE		SHALY SILTSTONE
	MARLSTONE		SHALY SANDSTONE
	CALCAREOUS SHALE		SANDSTONE
	DOLOMITE		ANHYDRITE

◀ FORMATION    ≈ CONNECTION    ▲ MIDNIGHT    🏠 NEW BIT    ☀ GAS SHOW





brn, s&p, sbrnd-sbang, f gr, w srt, w cmt, calc cmt; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc, tr fos frag; NSFOC

-4700 SS: wh, mlky, lt gy, lt brn, s&p, sbrnd-sbang, f gr, w srt, w cmt, calc cmt; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc, tr fos frag; NSFOC

-4672 INC 6.7, AZM 64.7, TVD 4637.29

-4700 WT 9.7, VIS 36

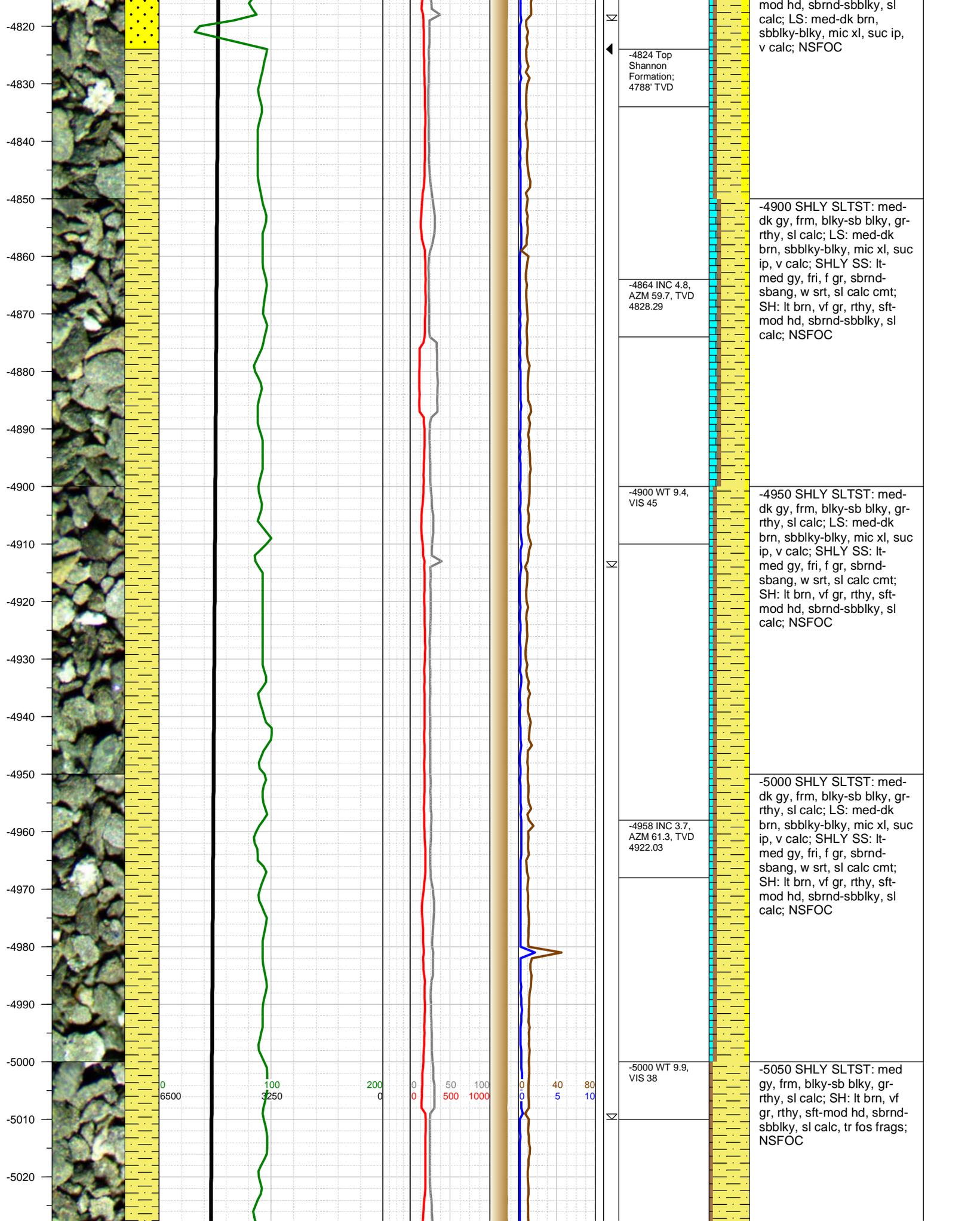
-4750 SS: wh, mlky, lt gy, lt brn, s&p, sbrnd-sbang, f gr, w srt, w cmt, calc cmt; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc, tr fos frag; NSFOC

-4768 INC 5.9, AZM 62.5, TVD 4732.71

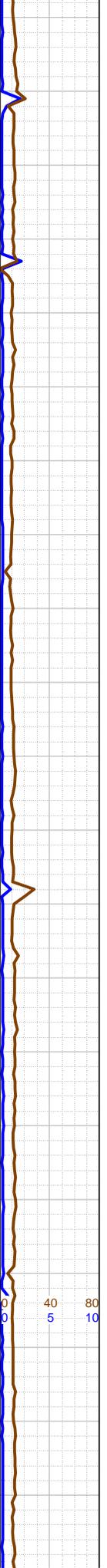
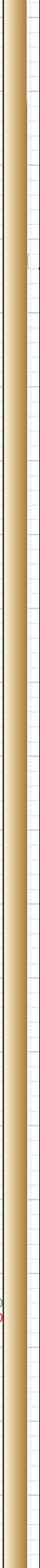
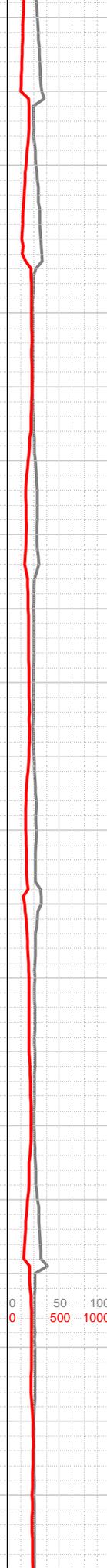
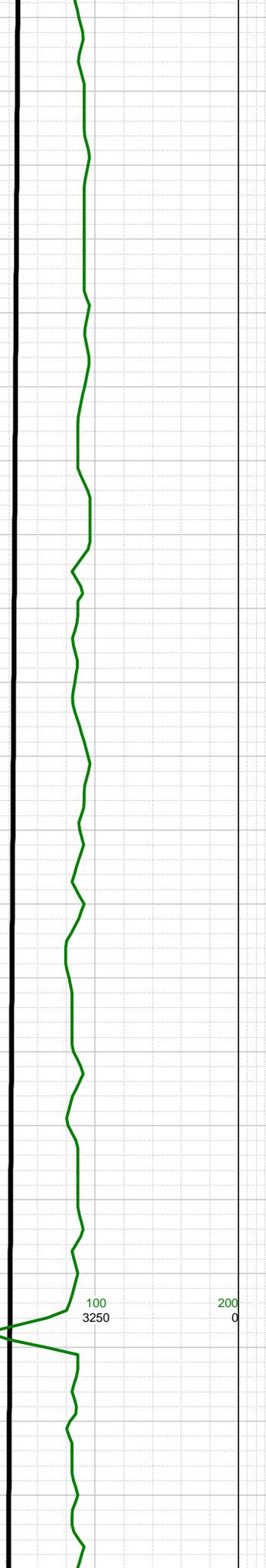
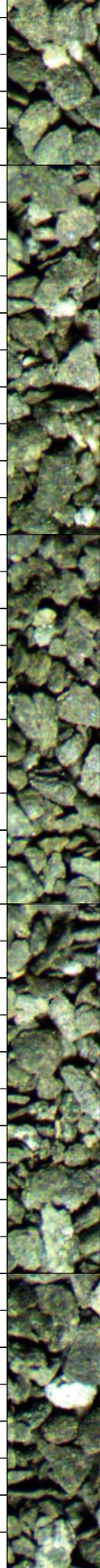
-4800 SS: wh, mlky, lt gy, lt brn, s&p, sbrnd-sbang, f gr, w srt, w cmt, calc cmt; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; tr fos frag; NSFOC

-4800 WT 9.4, VIS 45

-4850 SHLY SLTST: med-dk gy, frm, blk-y-sb blk-y, gr-rthy, sl calc; SHLY SS: lt-med gy, fri, f gr, sbrnd-sbang, w srt, sl calc cmt; SH: lt brn, vf gr, rthy, sft-



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-5054 INC 2.9,  
AZM 63.4, TVD  
5017.87

-5100 WT 10,  
VIS 37

-5149 INC 2.1,  
AZM 65.1, TVD  
5112.78

-5200 WT 10,  
VIS 37

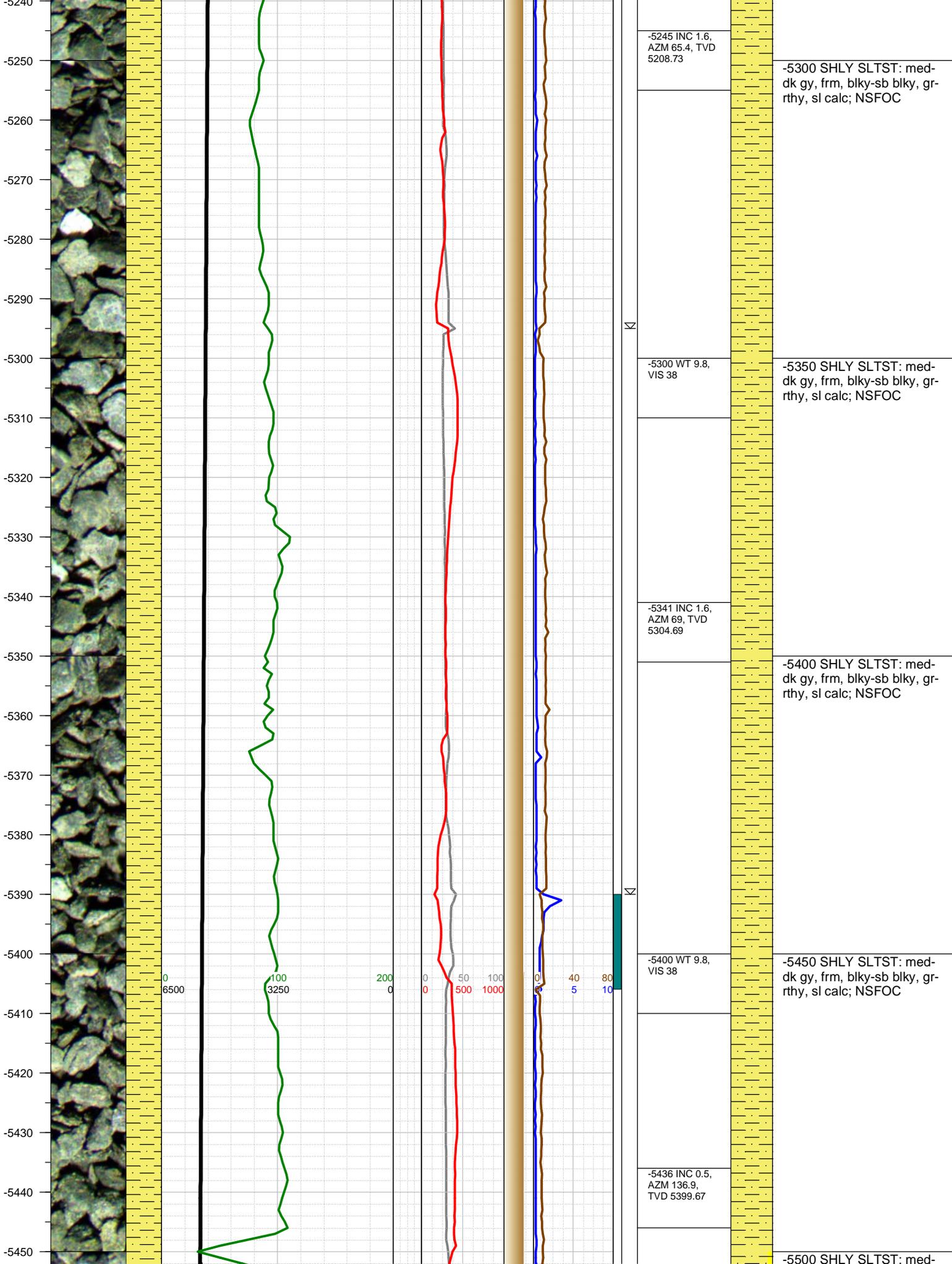


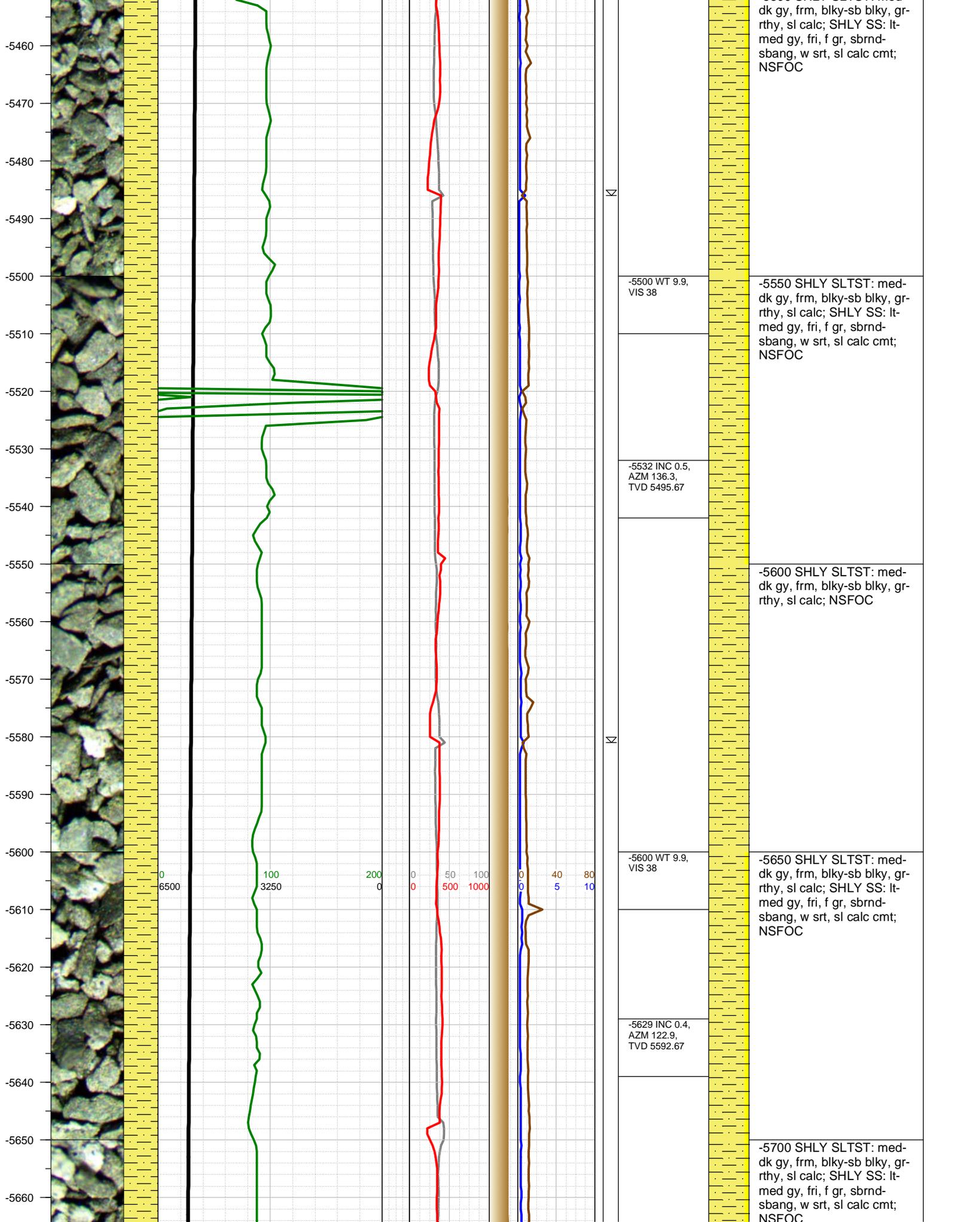
-5100 SHLY SLTST: med  
gy, frm, blk-y-sb blk-y, gr-  
rthy, sl calc; SH: lt brn, vf  
gr, rthy, sft-mod hd, sbrnd-  
sbbkly, sl calc; NSFOC

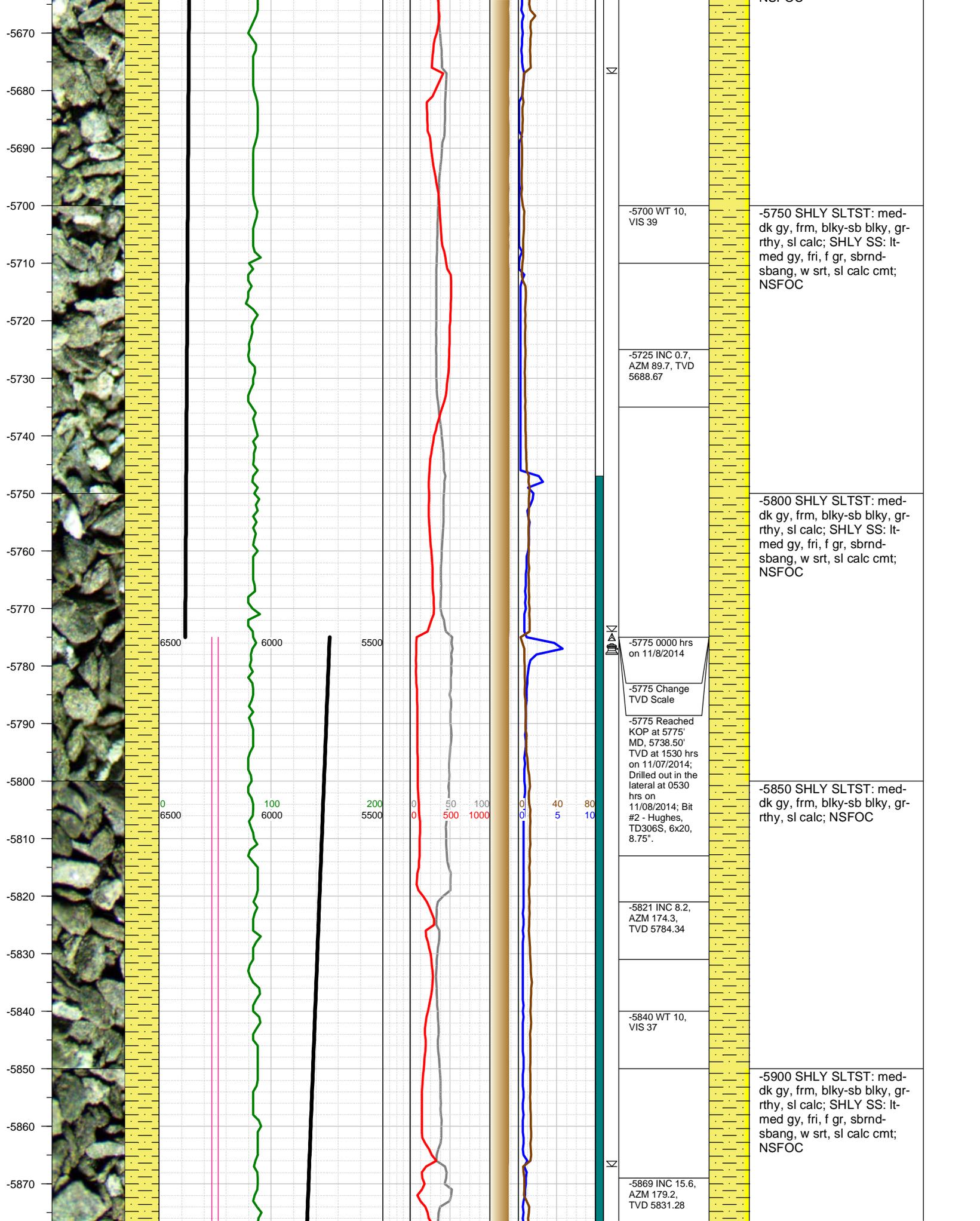
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gy, frm, blk-y-sb blk-y, gr-  
rthy, sl calc; SH: lt brn, vf  
gr, rthy, sft-mod hd, sbrnd-  
sbbkly, sl calc; NSFOC

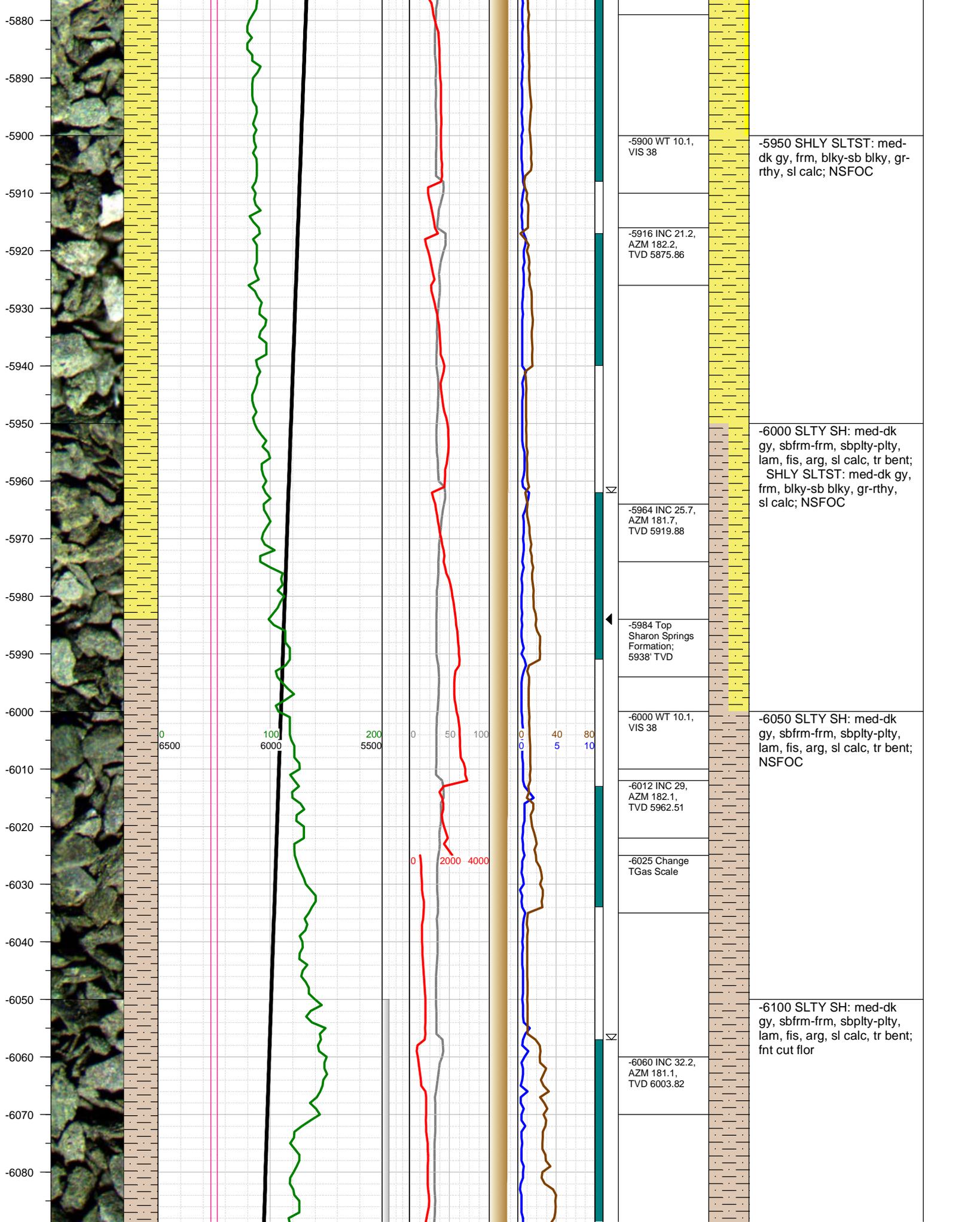
-5200 SHLY SLTST: med-  
dk gy, frm, blk-y-sb blk-y, gr-  
rthy, sl calc; NSFOC

-5250 SHLY SLTST: med-  
dk gy, frm, blk-y-sb blk-y, gr-  
rthy, sl calc; NSFOC

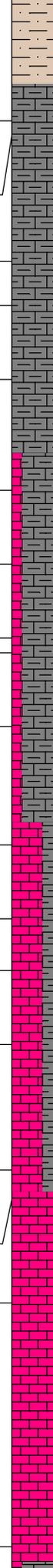
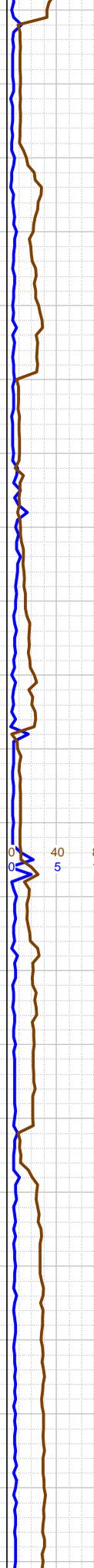
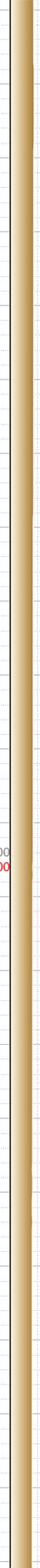
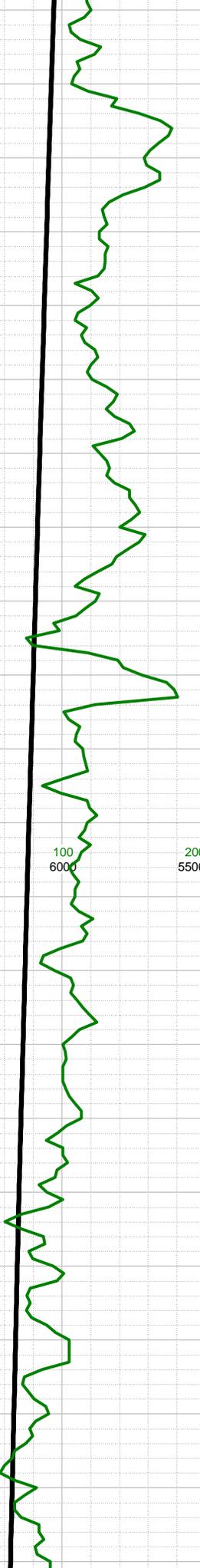
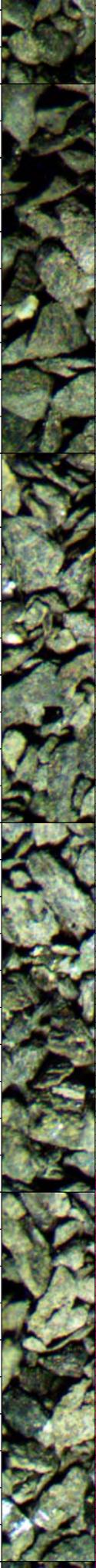








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-6105 Top Niobrara Formation; 6041' TVD  
-6107 INC 35.1, AZM 181.3, TVD 6042.94  
-6130 WT 10.2, VIS 38  
-6155 INC 39.8, AZM 182.3, TVD 6081.04  
-6165 Top A Chalk Formation; 6089' TVD  
-6177 Top A Marl Formation; 6098' TVD  
-6203 INC 43.5, AZM 182.6, TVD 6116.9  
-6220 WT 10.1, VIS 40  
-6247 Top B2 Chalk Formation; 6147' TVD  
-6251 INC 50.3, AZM 183.8, TVD 6149.68  
-6298 INC 56.5, AZM 184.6

-6150 MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, mod calc, sl arg, mod bent; bri cut flr w/streaming, bri lt blu res cut

-6200 MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, v calc, sl arg, tr bent; CHK: lt-med gy, sft-sbfrm, sbbly, mot, v calc, rthy lstr; fair cut flr w/streaming, fair med blu res cut

-6250 CHK: lt-med gy, sft-sbfrm, sbbly, mot, v calc, rthy lstr; MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, v calc, sl arg, tr bent; bri cut flr w/streaming, bri lt blu res cut

-6300 CHK: lt-med gy-brn, sft-sbfrm, sbbly, mot, v calc, rthy lstr; MARL: dk gy-brn to blk, sbbly-sbply, sft-sbfrm, v calc, sl arg; tr bent; tr fos frag; tr speckled w/foram; v bri cut flr w/streaming, bri lt grn res cut

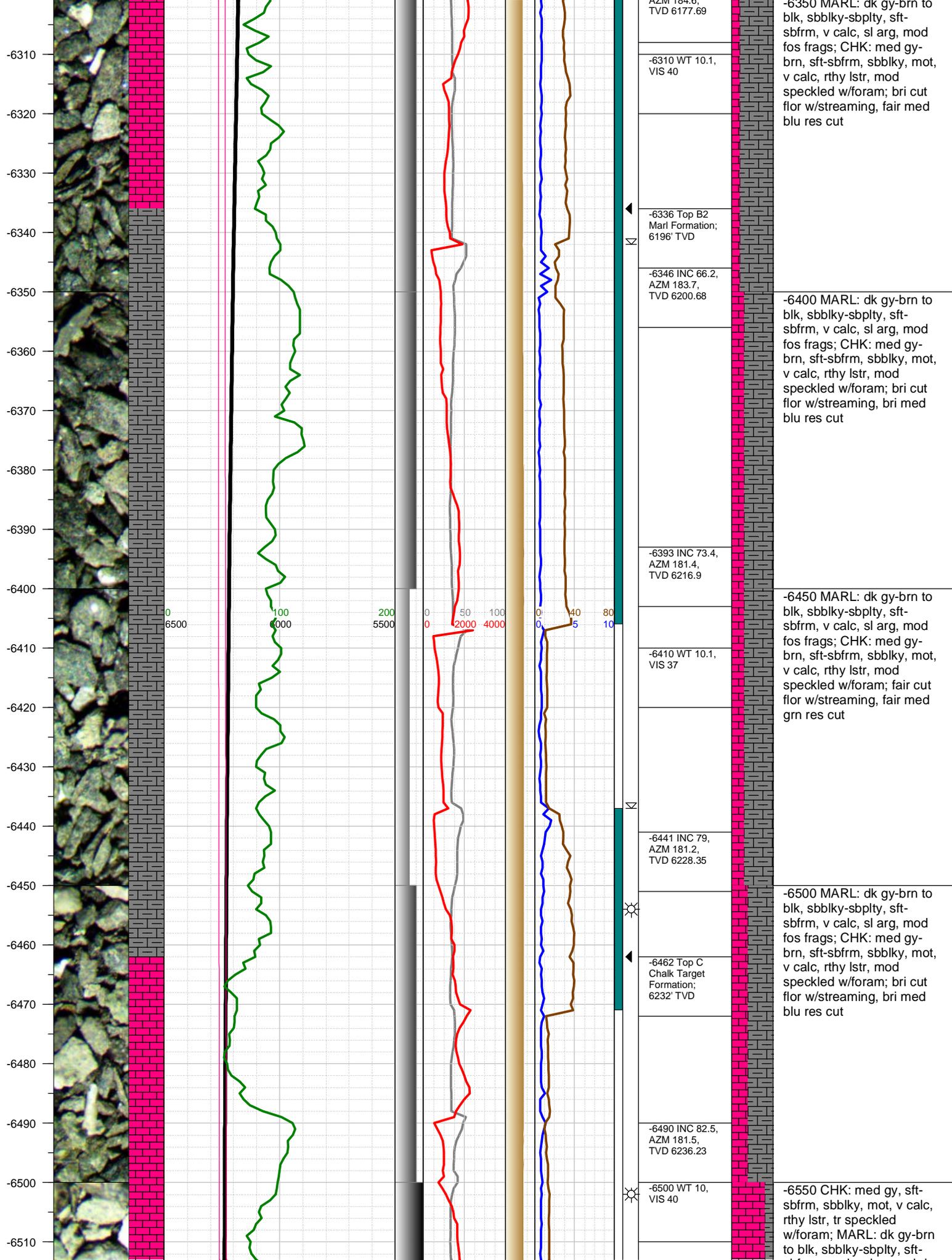
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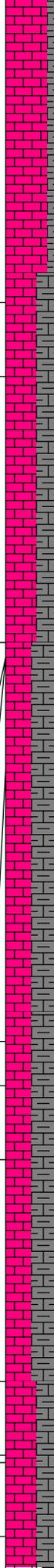
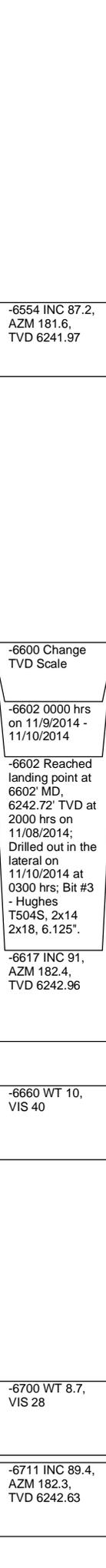
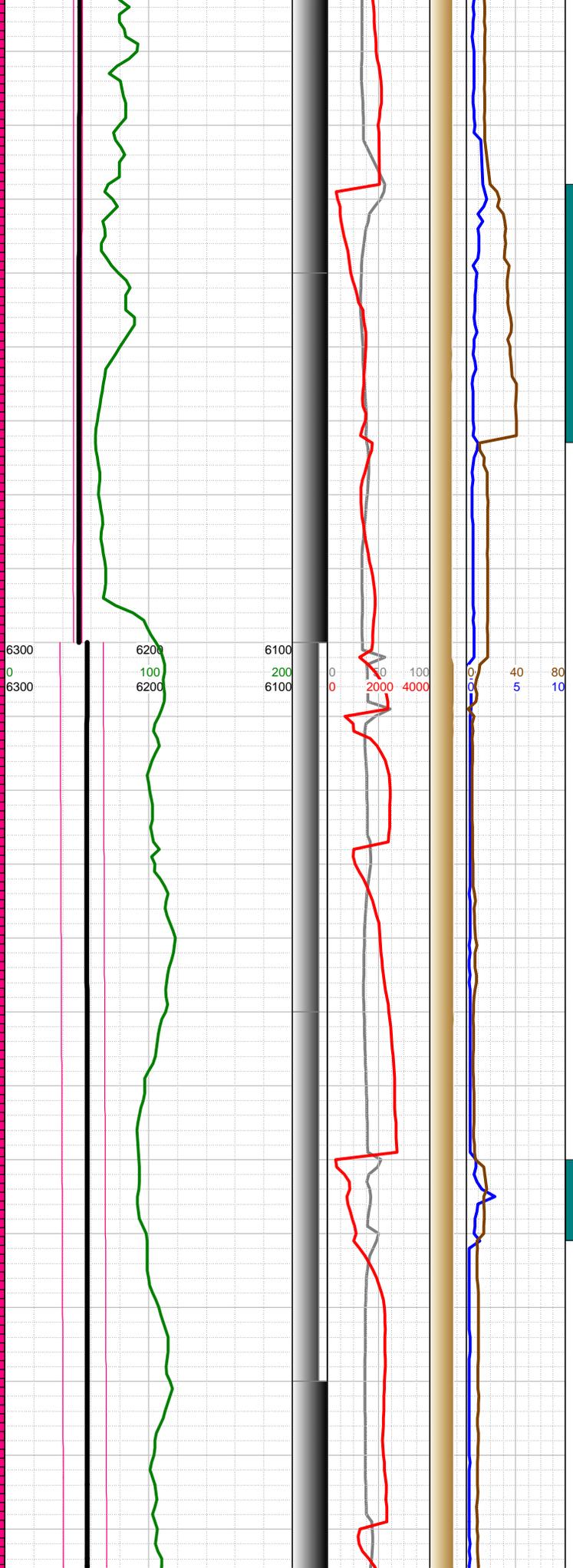
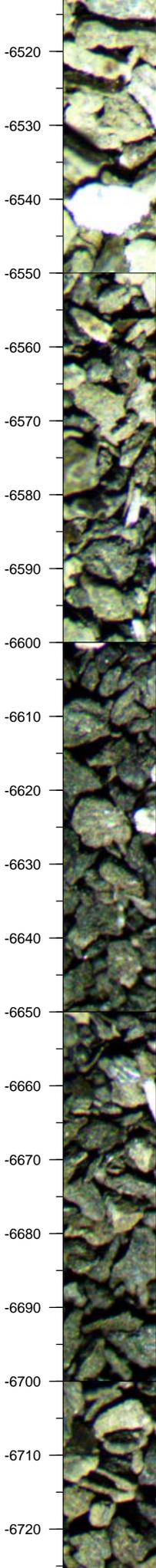
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0 5 10





sbfrm, v calc, sl arg, v bri cut flor w/streaming, bri lt blu res cut

-6600 CHK: med gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbblky-sbplty, sft-sbfrm, v calc, sl arg, v bri cut flor w/streaming, bri lt blu res cut

-6650 Change TVD Scale

-6602 0000 hrs on 11/9/2014 - 11/10/2014

-6602 Reached landing point at 6602' MD. 6242.72' TVD at 2000 hrs on 11/08/2014; Drilled out in the lateral on 11/10/2014 at 0300 hrs; Bit #3 - Hughes T504S, 2x14 2x18, 6.125".

-6617 INC 91, AZM 182.4, TVD 6242.96

-6660 WT 10, VIS 40

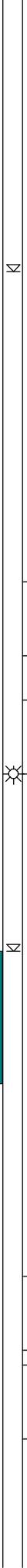
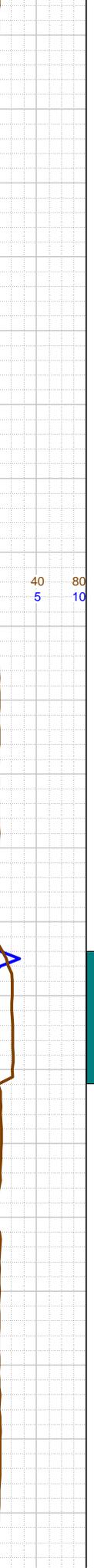
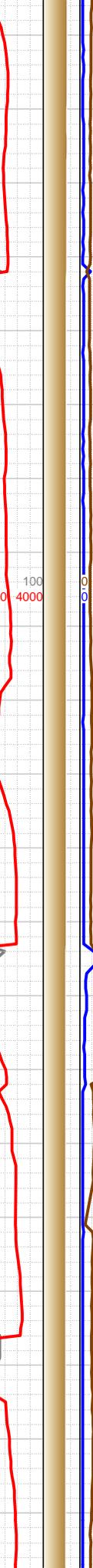
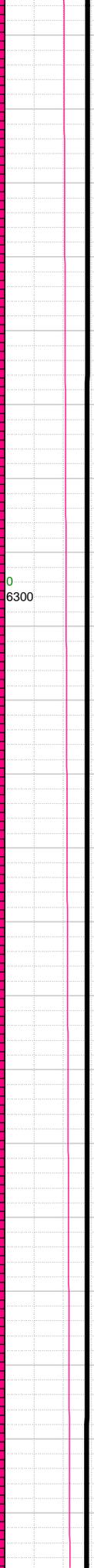
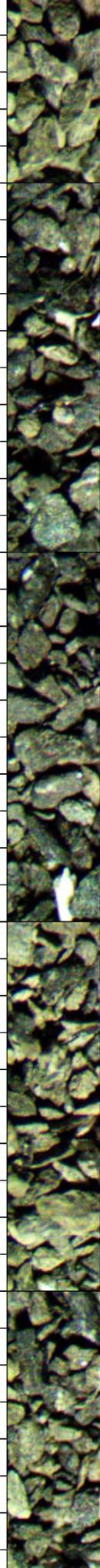
-6700 CHK: med-dk gy, sft-sbfrm, sbblky, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbblky-sbplty, sft-sbfrm, v calc, sl arg, mod fos frags; bri cut flor w/streaming, bri med blu res cut

-6700 WT 8.7, VIS 28

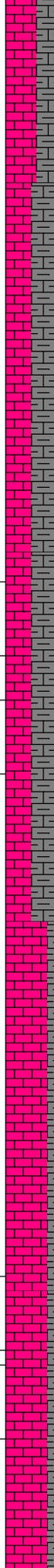
-6711 INC 89.4, AZM 182.3, TVD 6242.63

-6750 CHK: lt-med gy-brn, sft-sbfrm, sbblky, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbblky-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flor w/streaming, v bri li grn res cut

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6300 6200 6100 2000 4000 0 5 10  
-6804 INC 90.2,  
AZM 183.2,  
TVD 6242.95  
-6820 WT 8.5,  
VIS 29  
-6898 INC 89.6,  
AZM 180.6,  
TVD 6243.11  
-6910 WT 8.6,  
VIS 26



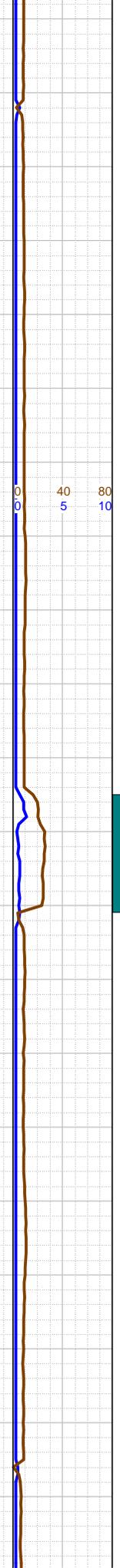
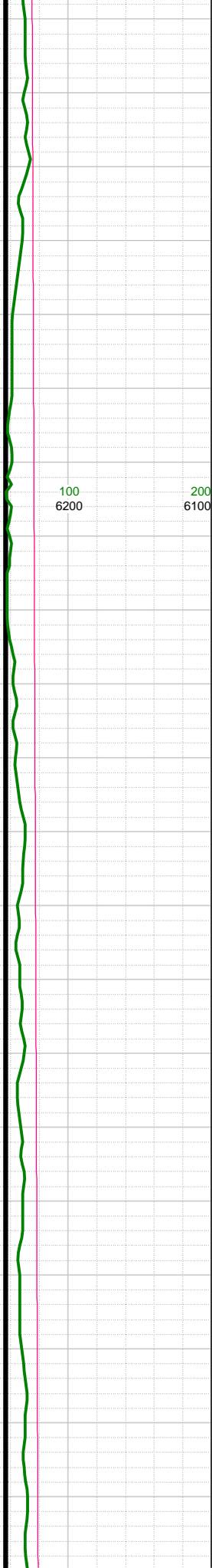
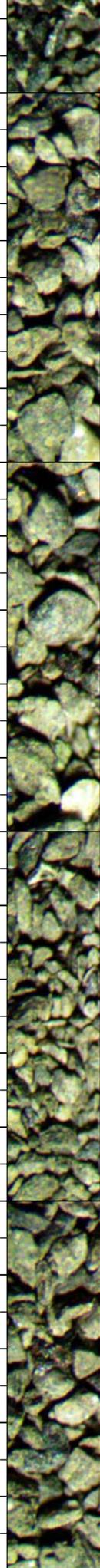
-6800 CHK: lt-med gy, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags; v bri cut flr w/streaming, v bri li grn res cut

-6850 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/streaming, v bri lt blu res cut

-6900 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/streaming, v bri lt blu res cut

-6950 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/streaming, v bri lt blu res cut

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-7000 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/steaming, bri med blu res cut

-6991 INC 89.9, AZM 181.3, TVD 6243.52

-7000 WT 8.6, VIS 26

-7050 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/steaming, bri med blu res cut

-7100 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram, tr fos frags; v bri cut flr w/steaming, v bri med blu res cut

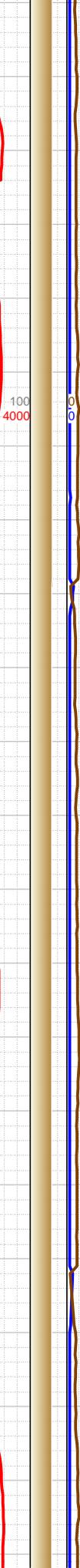
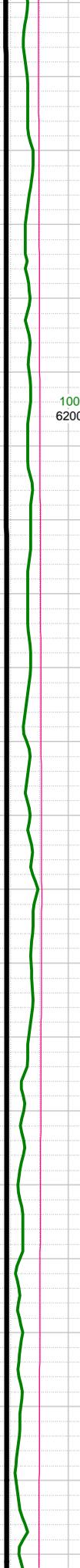
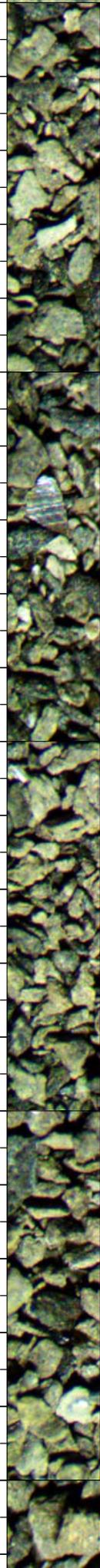
-7085 INC 90.2, AZM 179.6, TVD 6243.44

-7100 WT 8.5, VIS 26

-7150 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram, tr fos frags; v bri cut flr w/steaming, v bri med blu res cut

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-7178 INC 90.2,  
AZM 178.7,  
TVD 6243.12

-7200 WT 8.6,  
VIS 26



-7272 INC 90.5,  
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TVD 6242.55

-7300 WT 8.6,  
VIS 26



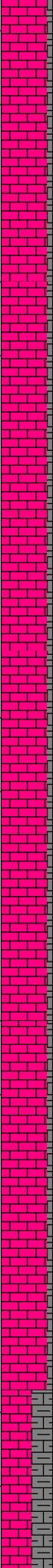
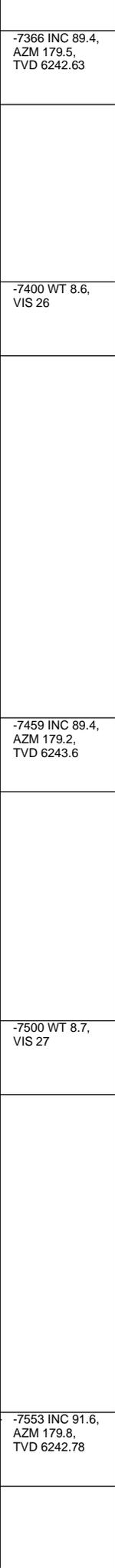
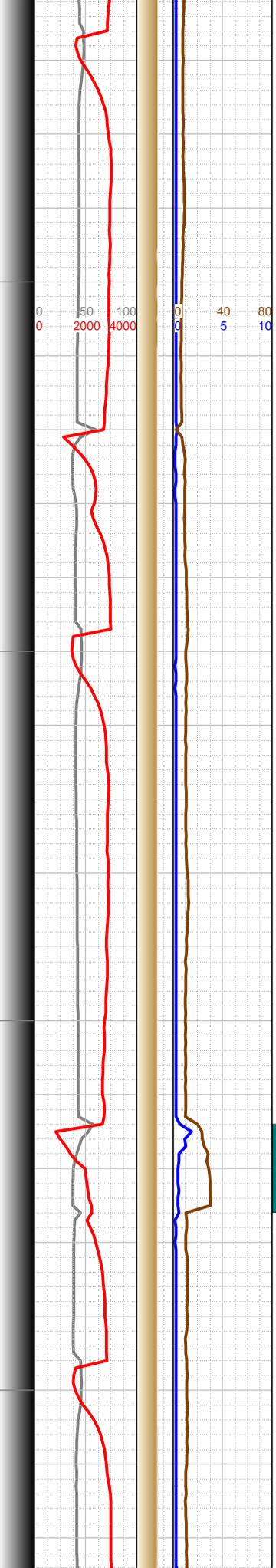
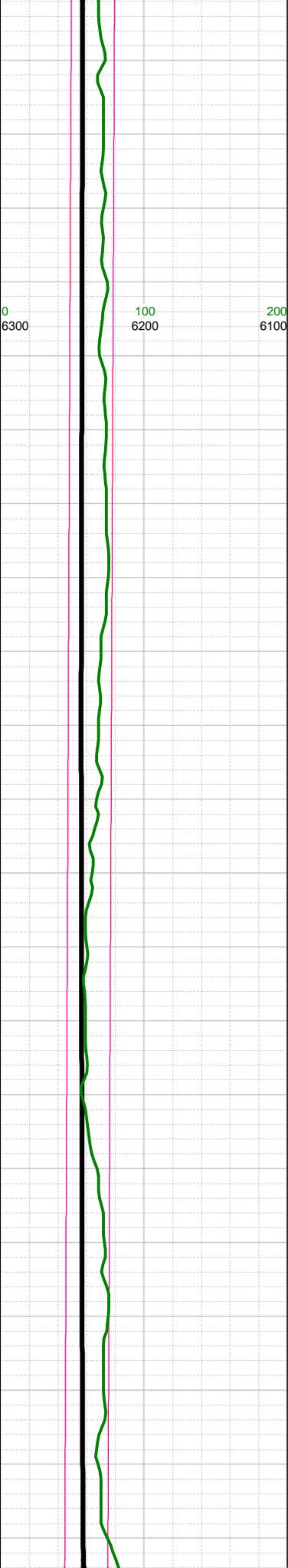
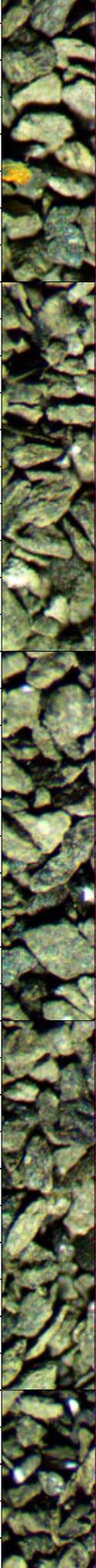
-7200 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flor w/steaming, bri med blu res cut

-7250 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flor w/steaming, bri med blu res cut

-7300 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flor w/steaming, v bri med blu res cut

-7350 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v

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-7366 INC 89.4,  
AZM 179.5,  
TVD 6242.63

-7400 WT 8.6,  
VIS 26

-7459 INC 89.4,  
AZM 179.2,  
TVD 6243.6

-7500 WT 8.7,  
VIS 27

☀ -7553 INC 91.6,  
AZM 179.8,  
TVD 6242.78

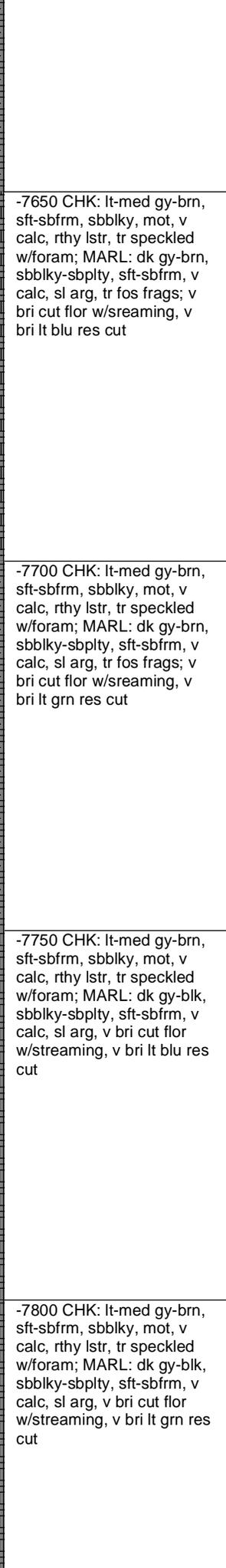
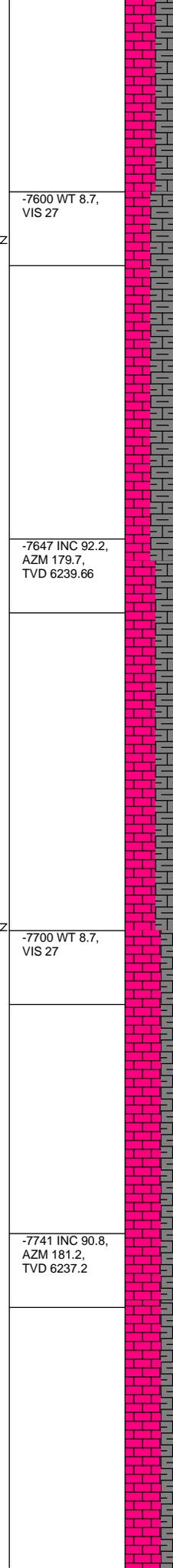
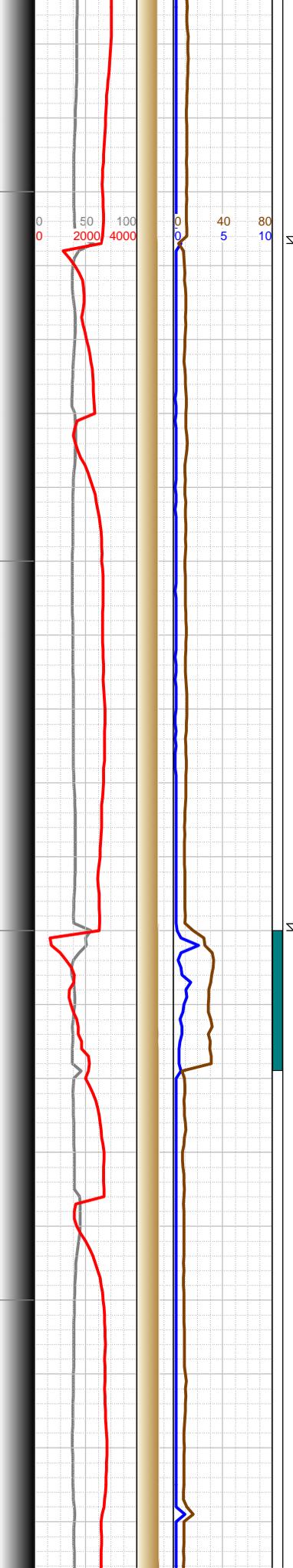
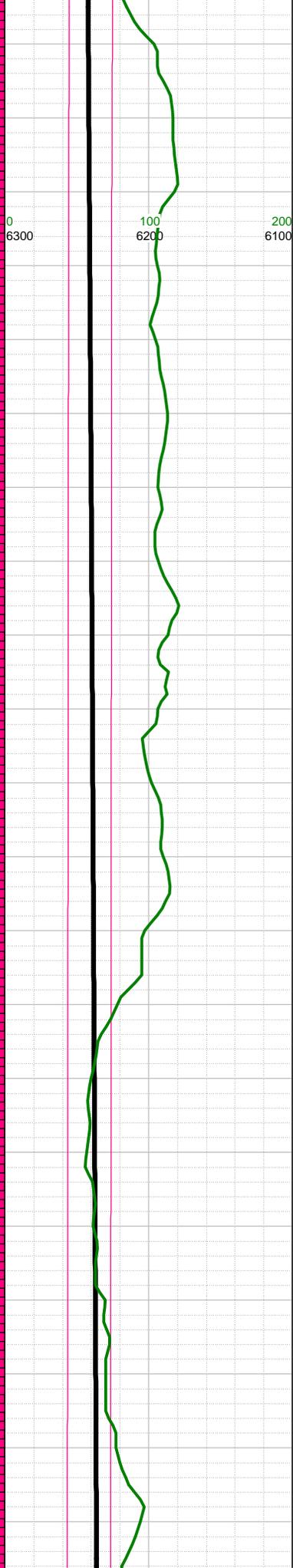
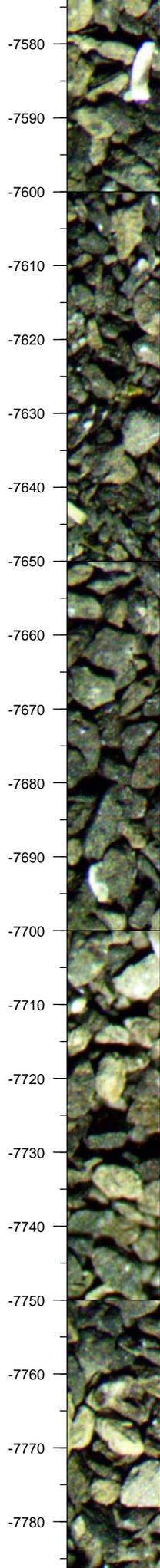
calc, sl arg, tr fos frags; v  
bri cut flor w/sreaming, v  
bri lt blu res cut

-7450 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags; v  
bri cut flor w/sreaming, v  
bri lt blu res cut

-7500 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags; v  
bri cut flor w/sreaming, v  
bri med blu res cut

-7550 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags; v  
bri cut flor w/sreaming, v  
bri lt blu res cut

-7600 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-brn,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags; v  
bri cut flor w/sreaming, v  
bri lt grn res cut



-7600 WT 8.7,  
VIS 27

-7650 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/sreaming, v bri lt blu res cut

-7647 INC 92.2,  
AZM 179.7,  
TVD 6239.66

-7700 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, tr fos frags; v bri cut flr w/sreaming, v bri lt grn res cut

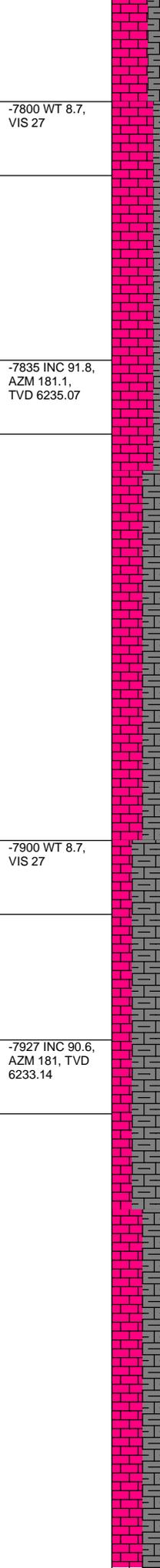
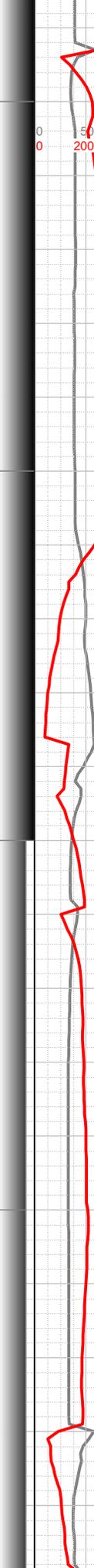
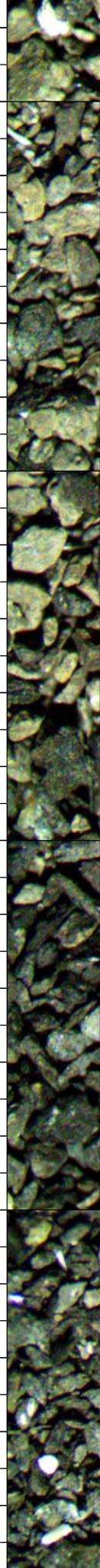
-7700 WT 8.7,  
VIS 27

-7750 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, v bri cut flr w/streaming, v bri lt blu res cut

-7741 INC 90.8,  
AZM 181.2,  
TVD 6237.2

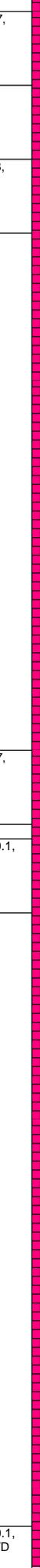
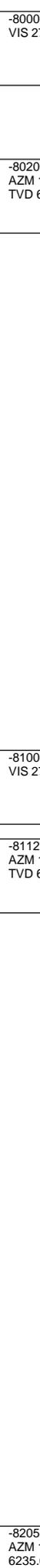
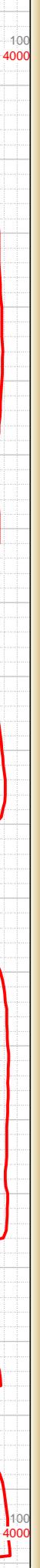
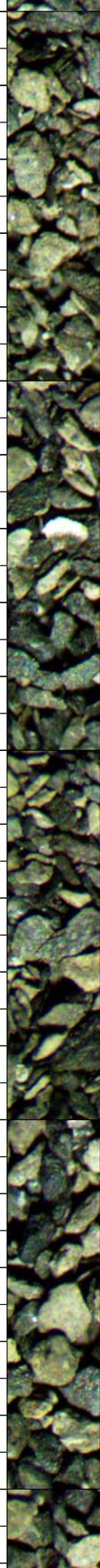
-7800 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbplty, sft-sbfrm, v calc, sl arg, v bri cut flr w/streaming, v bri lt grn res cut

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-7990



-7800 WT 8.7, VIS 27  
-7850 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn to blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, bri lt blu res cut  
-7835 INC 91.8, AZM 181.1, TVD 6235.07  
-7900 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn to blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, bri lt blu res cut  
-7950 MARL: dk gy-brn to blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, CHK: med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; bri cut flor w/streaming, fair med blu res cut  
-7927 INC 90.6, AZM 181, TVD 6233.14  
-8000 CHK: med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn to blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, bri cut flor w/streaming, bri med blu res cut

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-8210



-8000 WT 8.7,  
VIS 27

-8020 INC 88,  
AZM 181.9,  
TVD 6234.28

-8100 WT 8.7,  
VIS 27

-8112 INC 90.1,  
AZM 181.7,  
TVD 6235.81

-8205 INC 90.1,  
AZM 181, TVD  
6235.65

-8050 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/steaming, v bri  
med blu res cut

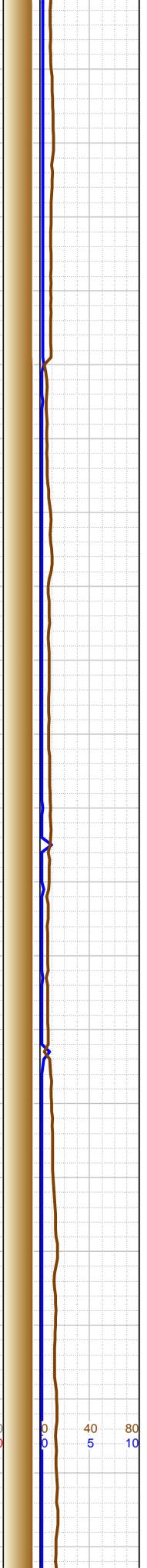
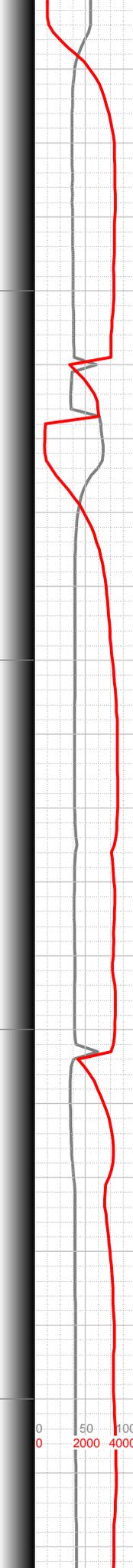
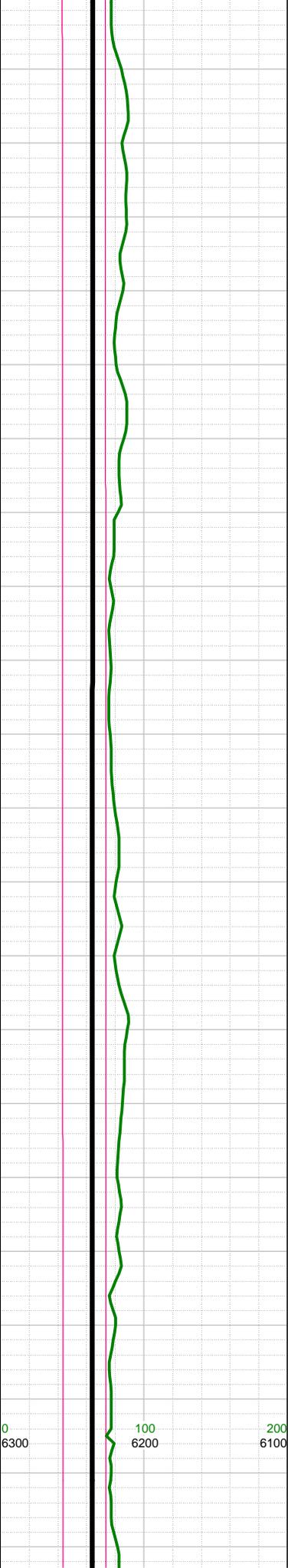
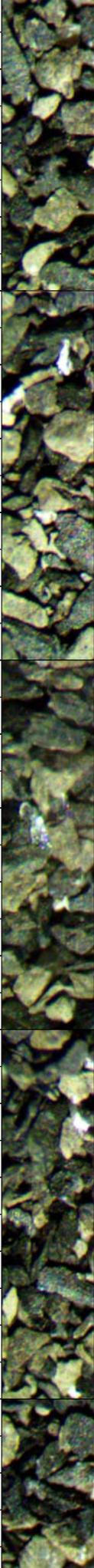
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sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, bri  
med blu res cut

-8150 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/sreaming, v  
bri lt blu res cut

-8200 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/sreaming, v  
bri lt blu res cut

-8250 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,

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-8420



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-8220 WT 8.6,  
VIS 28

-8298 INC 89.8,  
AZM 180.2,  
TVD 6235.73

-8310 WT 8.6,  
VIS 28

-8390 INC 89.9,  
AZM 179.3,  
TVD 6235.97

-8400 WT 8.7,  
VIS 28

sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flor w/sreaming, v  
bri lt grn res cut

-8300 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flor w/sreaming, v  
bri lt blu res cut

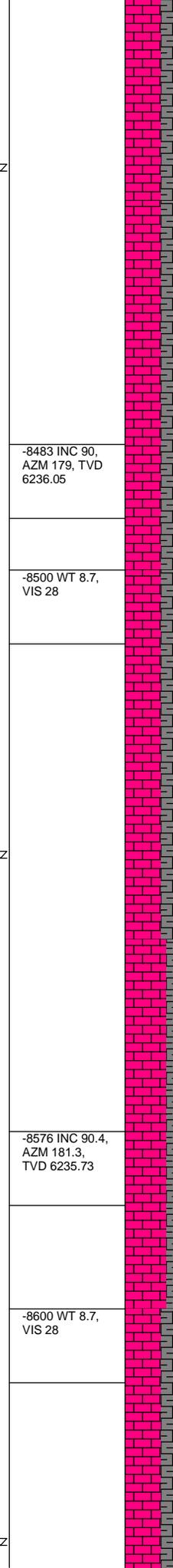
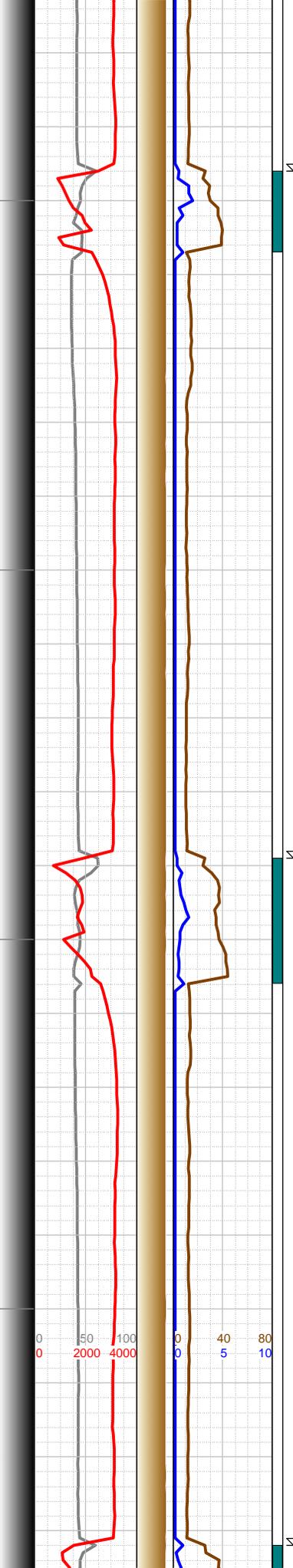
-8350 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flor w/sreaming, v  
bri lt blu res cut

-8400 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flor w/sreaming, v  
bri lt blu res cut

-8450 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flor w/sreaming, v  
bri lt blu res cut

0 100 200 0 50 100 0 40 80  
6300 6200 6100 0 2000 4000 0 5 10

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-8483 INC 90,  
AZM 179, TVD  
6236.05

-8500 WT 8.7,  
VIS 28

-8576 INC 90.4,  
AZM 181.3,  
TVD 6235.73

-8600 WT 8.7,  
VIS 28

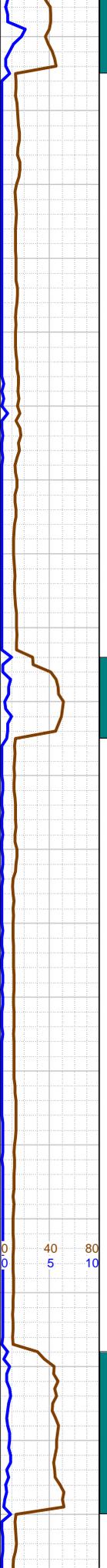
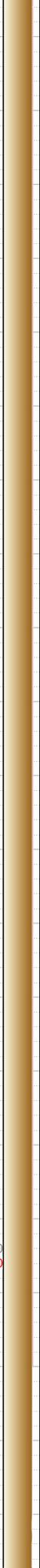
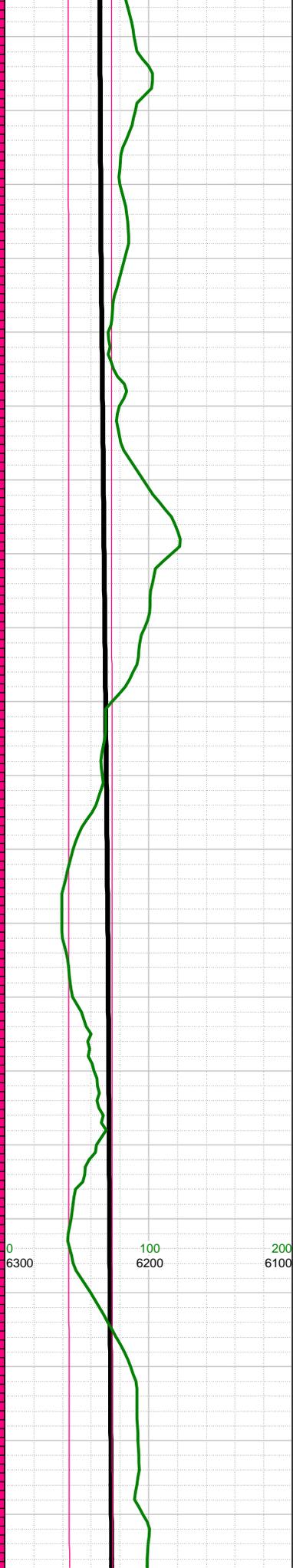
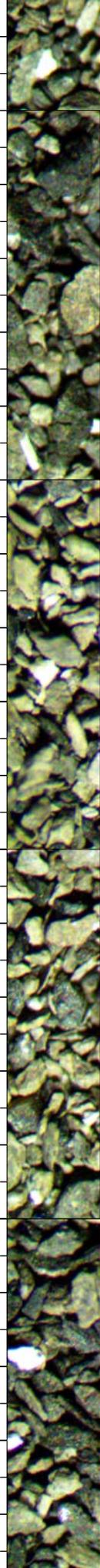
-8500 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/sreaming, v  
bri lt blu res cut

-8550 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/sreaming, bri  
lt blu res cut

-8600 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, v  
bri lt blu res cut

-8650 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, v  
bri lt blu res cut

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-8670 INC 92.9,  
AZM 182.6,  
TVD 6233.02

-8700 WT 8.7,  
VIS 28

-8763 INC 93,  
AZM 181.7,  
TVD 6228.23

-8800 WT 8.7,  
VIS 28

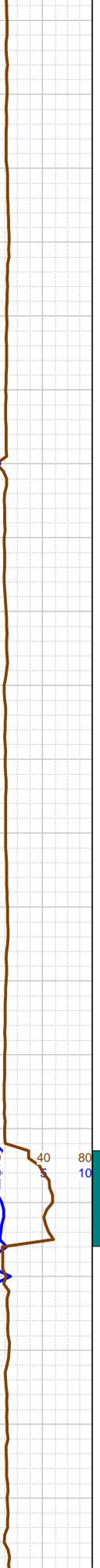
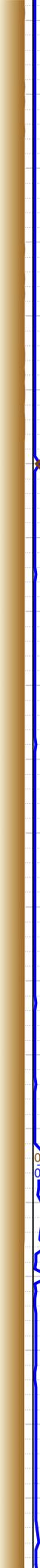
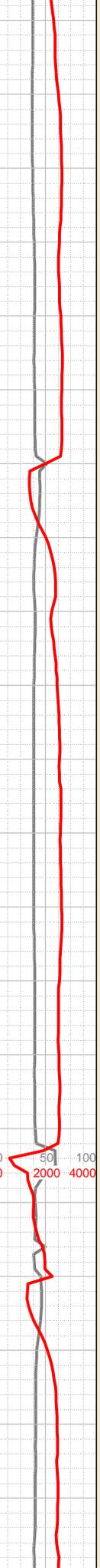
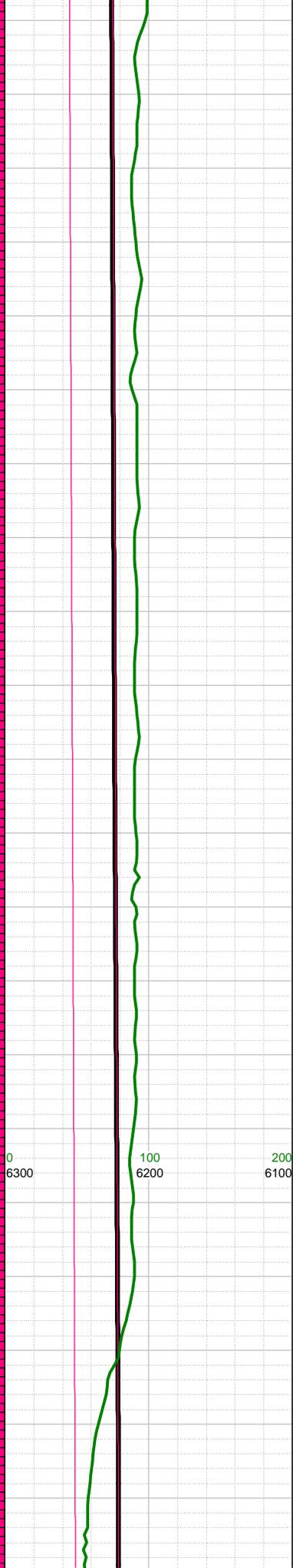
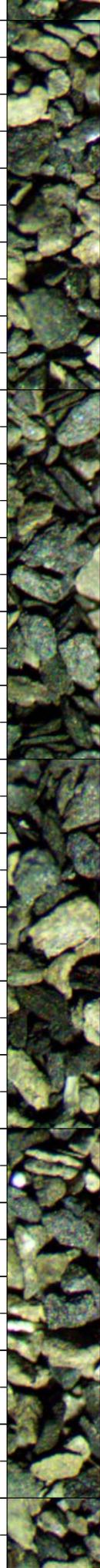
-8700 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-8750 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

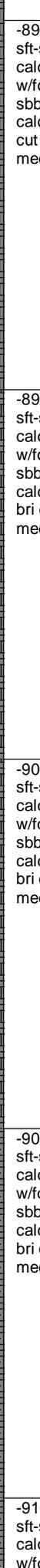
-8800 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-8850 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, bri cut flor w/streaming, bri med blu res cut

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-8854 INC 90.4, AZM 179.8, TVD 6225.53
▲ -8865 0000 hrs on 11/11/2014
-8900 WT 8.7, VIS 28
▽
-8946 INC 91.8, AZM 180.9, TVD 6223.76
▽
-9000 WT 8.7, VIS 28
▽
-9038 INC 91.4, AZM 180.2, TVD 6221.19



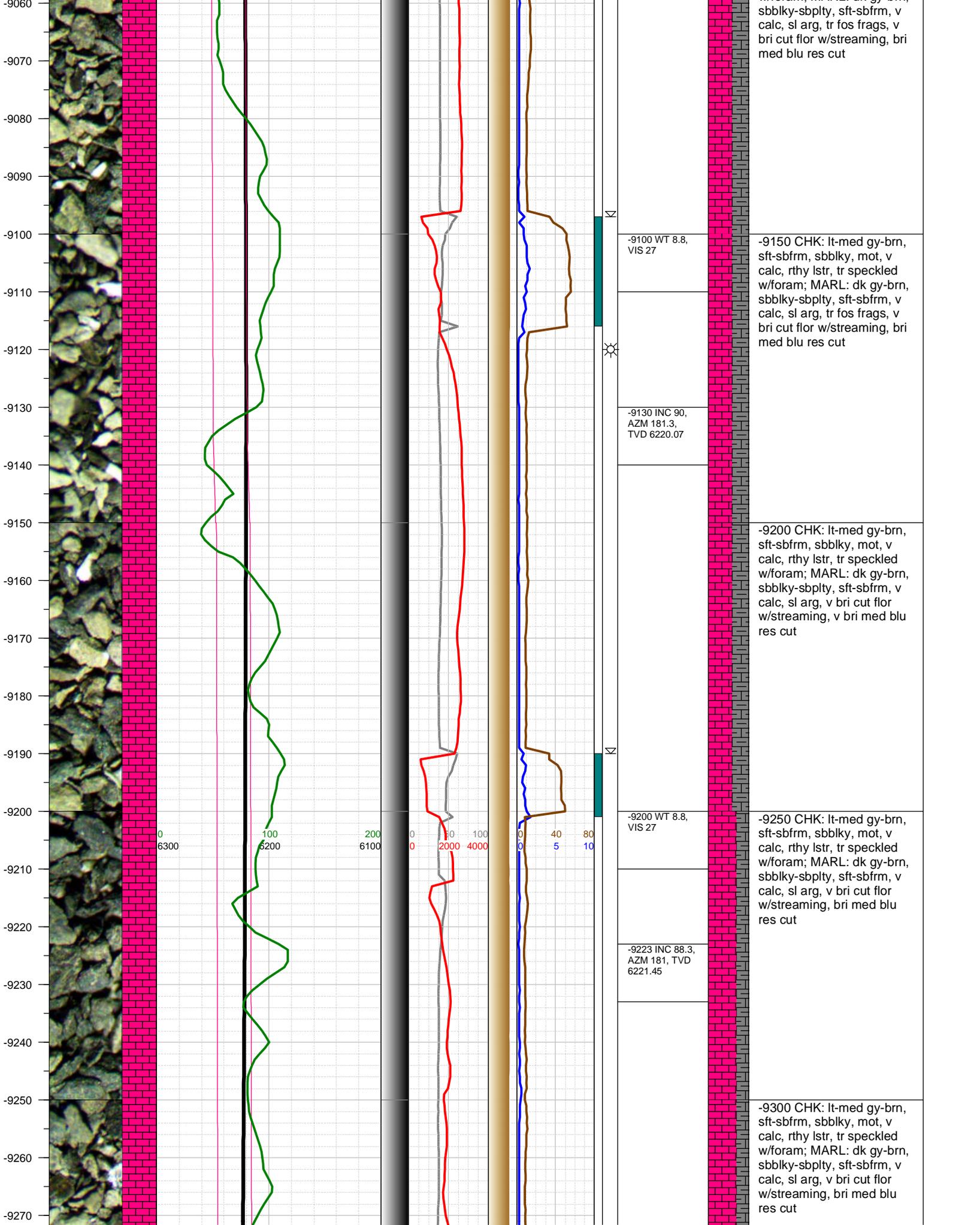
-8900 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, bri cut flor w/streaming, bri med blu res cut

-8950 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, bri cut flor w/streaming, fair med blu res cut

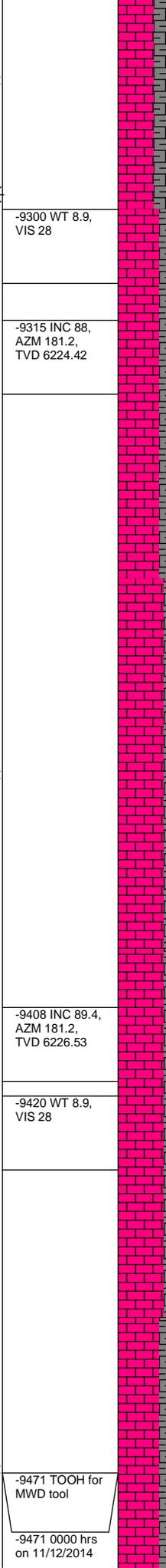
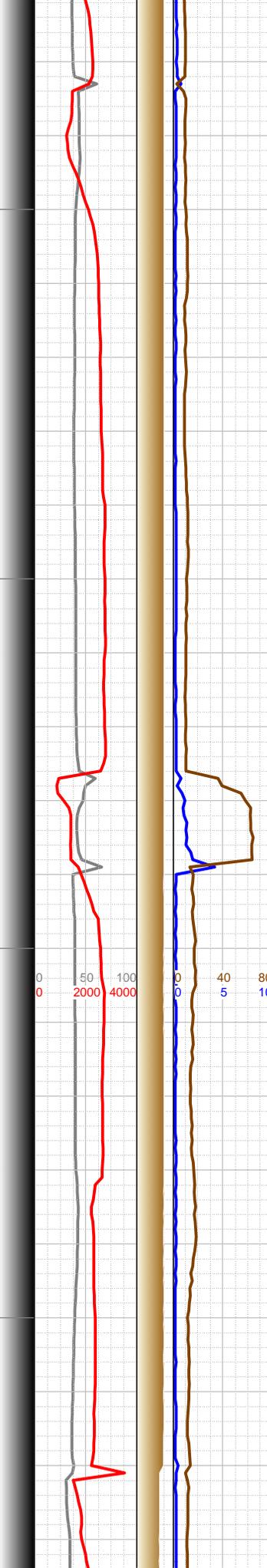
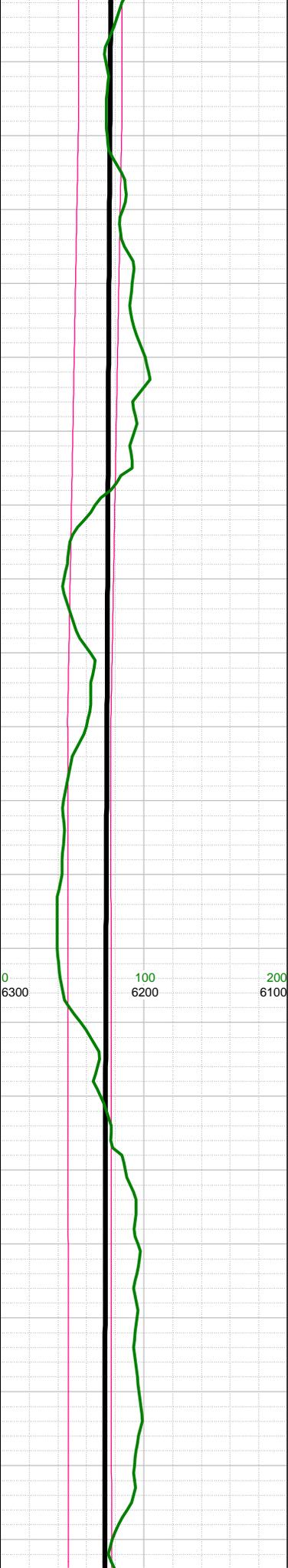
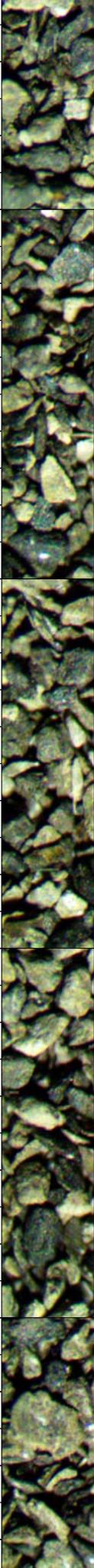
-9000 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, bri cut flor w/streaming, bri med blu res cut

-9050 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, bri med blu res cut

-9100 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-brn,



-9280  
-9290  
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-9460  
-9470  
-9480



-9300 WT 8.9,  
VIS 28

-9315 INC 88,  
AZM 181.2,  
TVD 6224.42

-9408 INC 89.4,  
AZM 181.2,  
TVD 6226.53

-9420 WT 8.9,  
VIS 28

-9471 TOOH for  
MWD tool

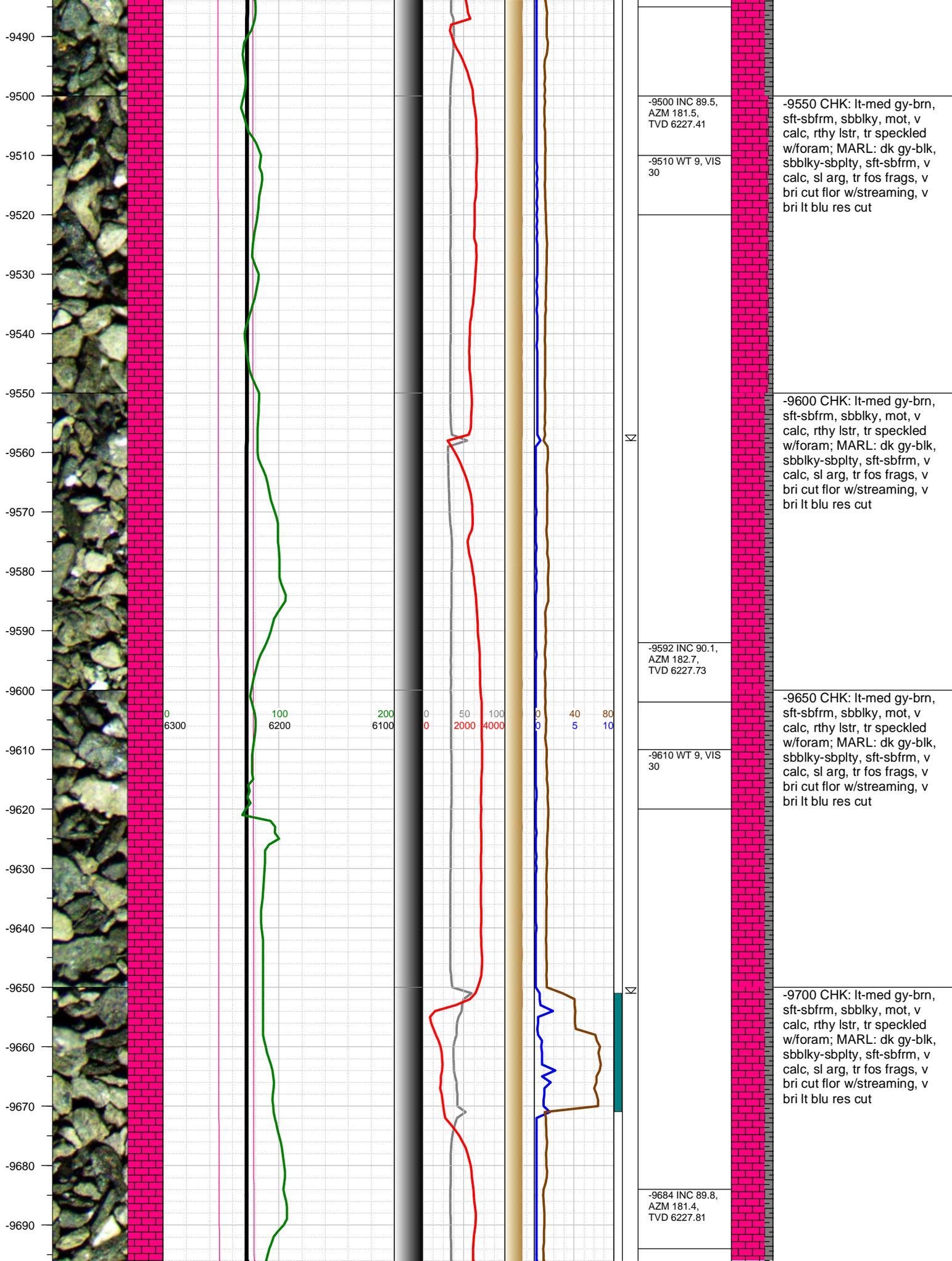
-9471 0000 hrs  
on 11/12/2014

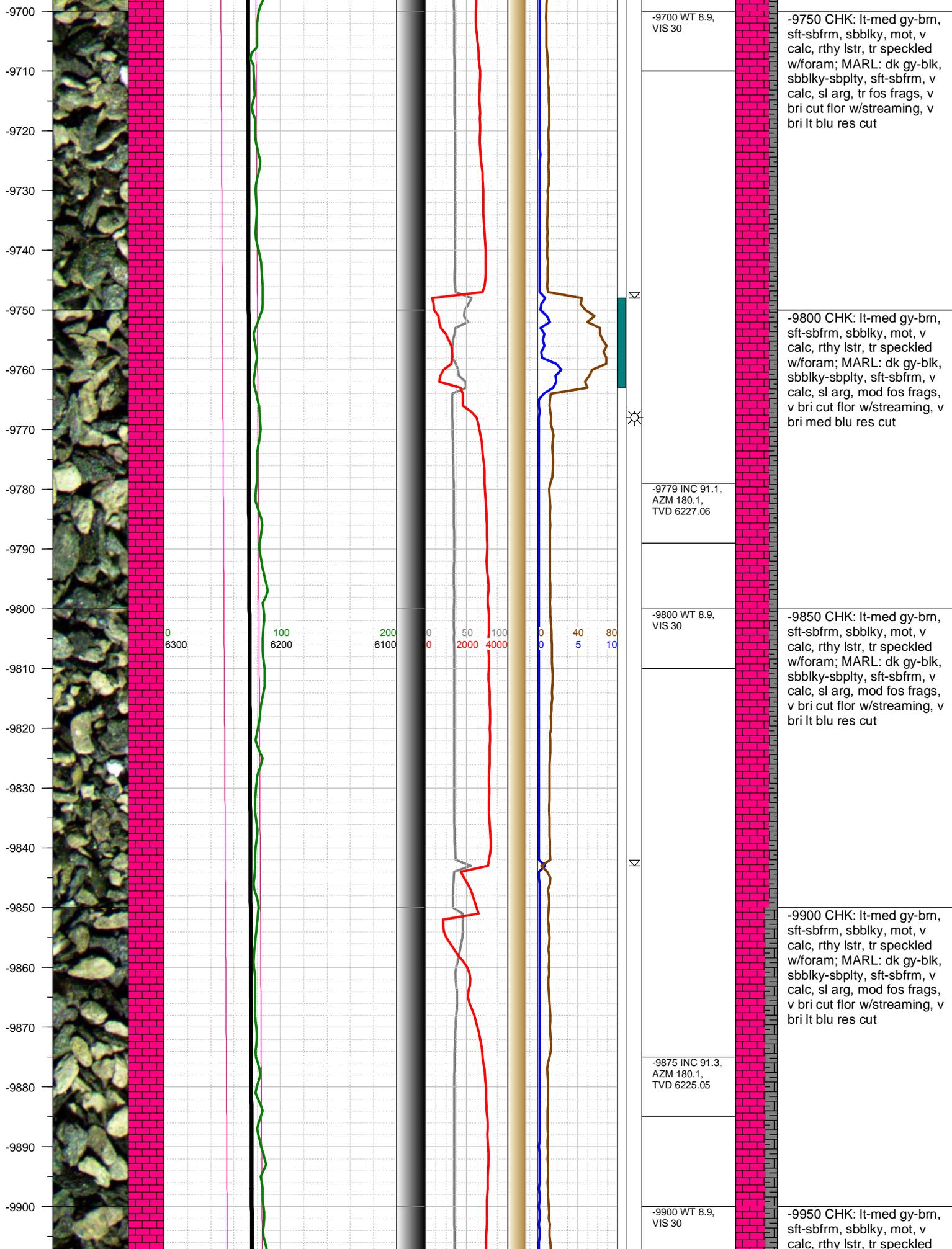
-9350 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, v  
bri med blu res cut

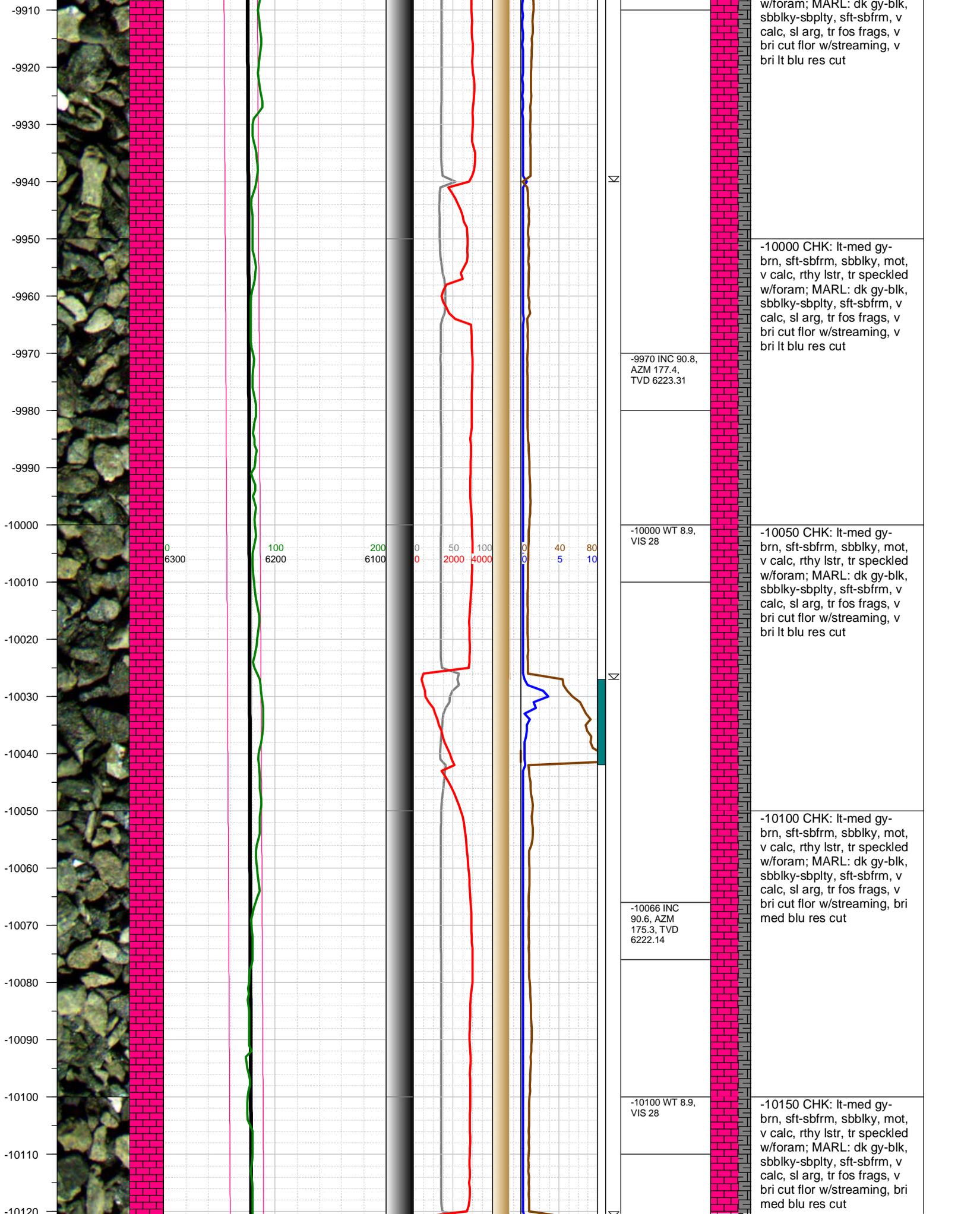
-9400 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, v  
bri med blu res cut

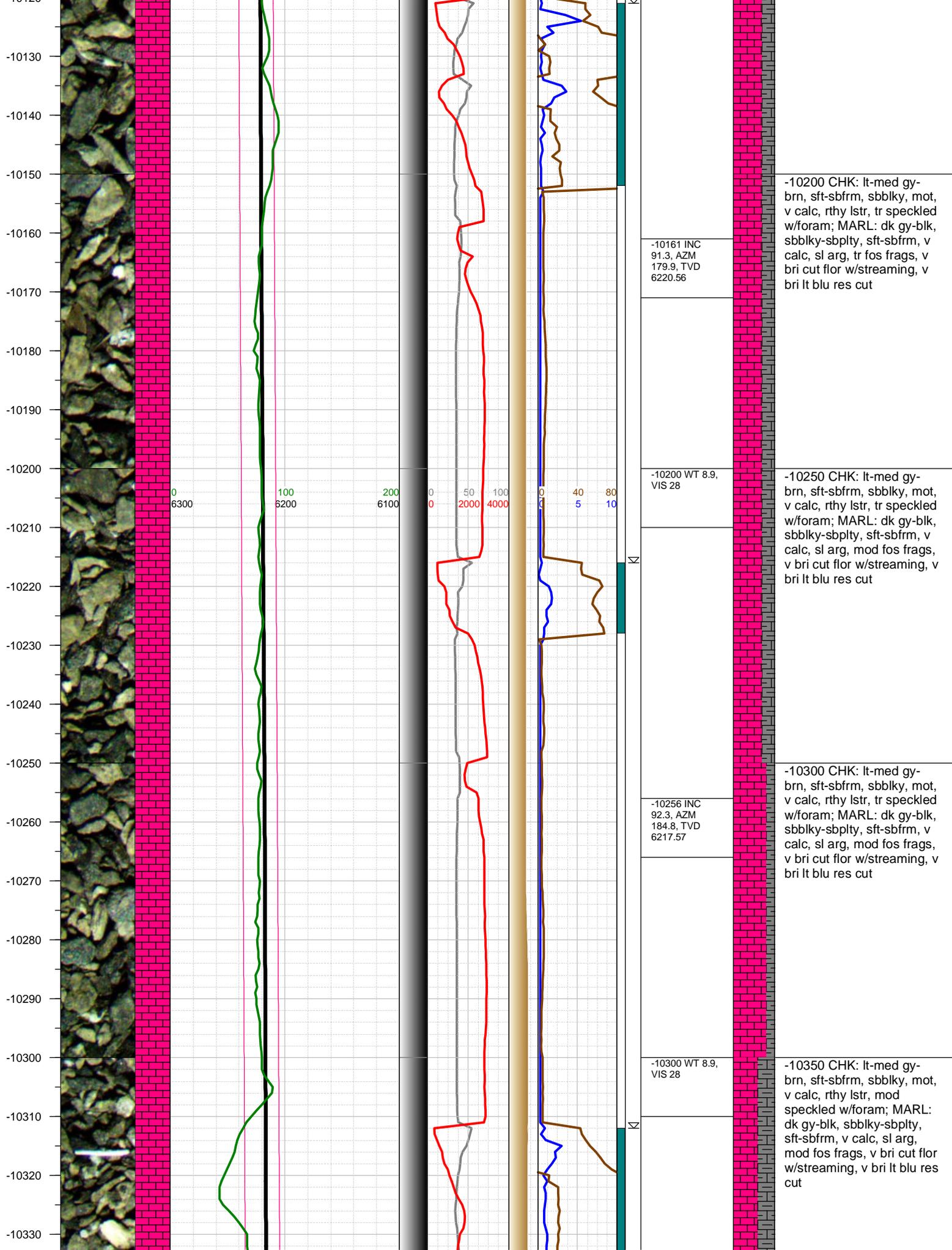
-9450 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, tr fos frags, v  
bri cut flr w/streaming, v  
bri lt blu res cut

-9500 CHK: lt-med gy-brn,  
sft-sbfrm, sbbkly, mot, v  
calc, rthy lstr, tr speckled  
w/foram; MARL: dk gy-blk,  
sbbkly-sbply, sft-sbfrm, v  
calc, sl arg, mod fos frags,  
v bri cut flr w/streaming, v  
bri lt blu res cut

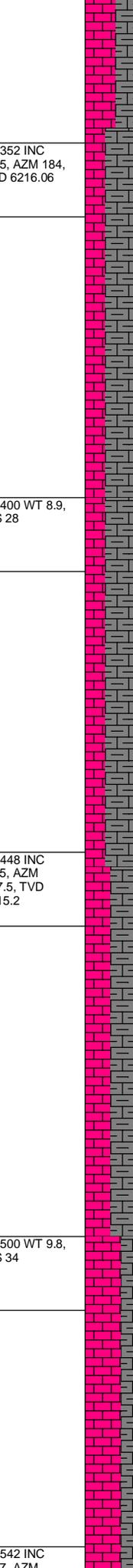
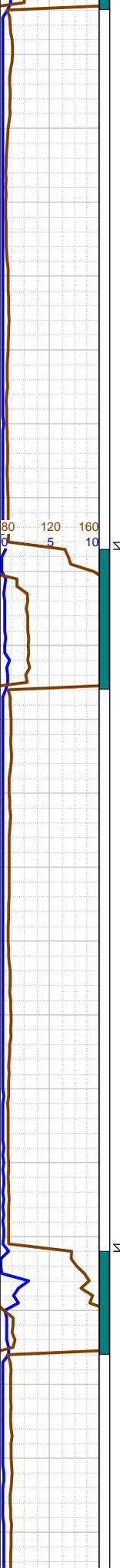
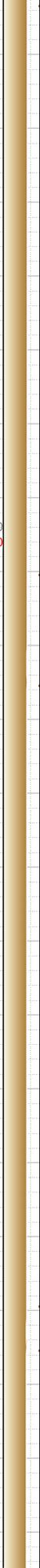
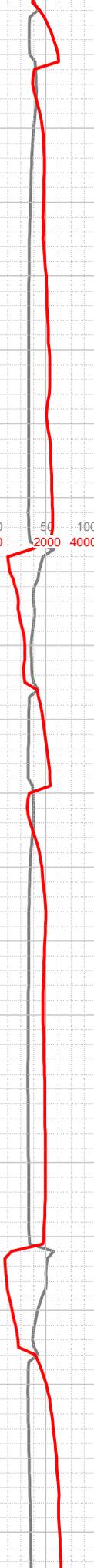
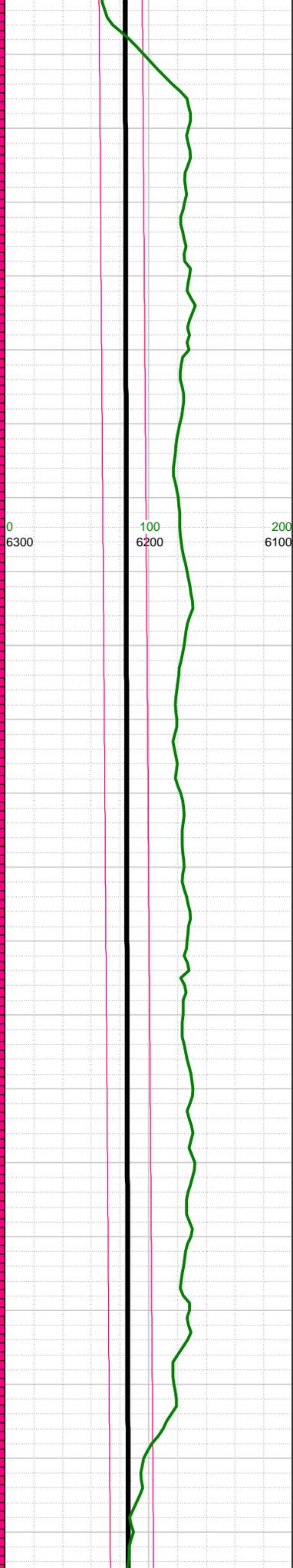
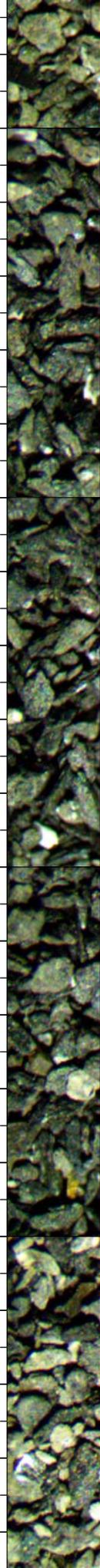








-10340  
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-10490  
-10500  
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-10530  
-10540



-10352 INC  
89.5, AZM 184,  
TVD 6216.06

-10400 WT 8.9,  
VIS 28

-10448 INC  
91.5, AZM  
187.5, TVD  
6215.2

-10500 WT 9.8,  
VIS 34

-10542 INC  
89.7, AZM

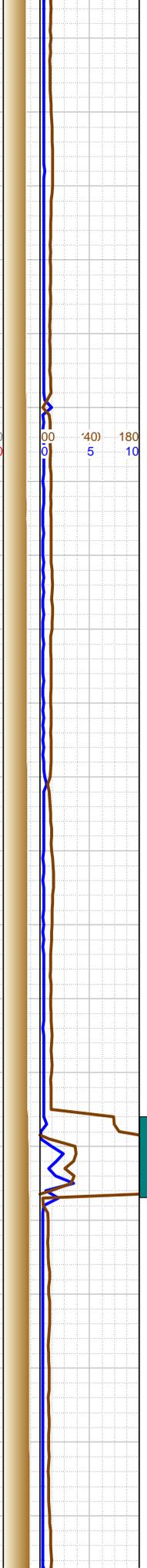
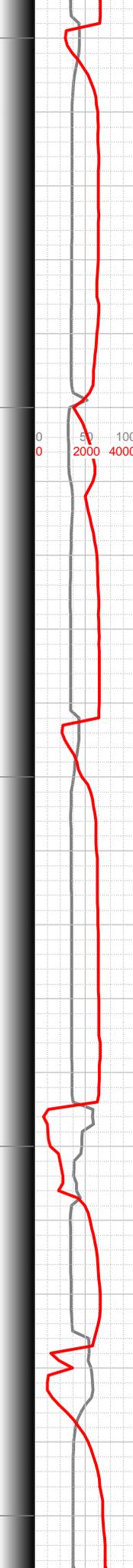
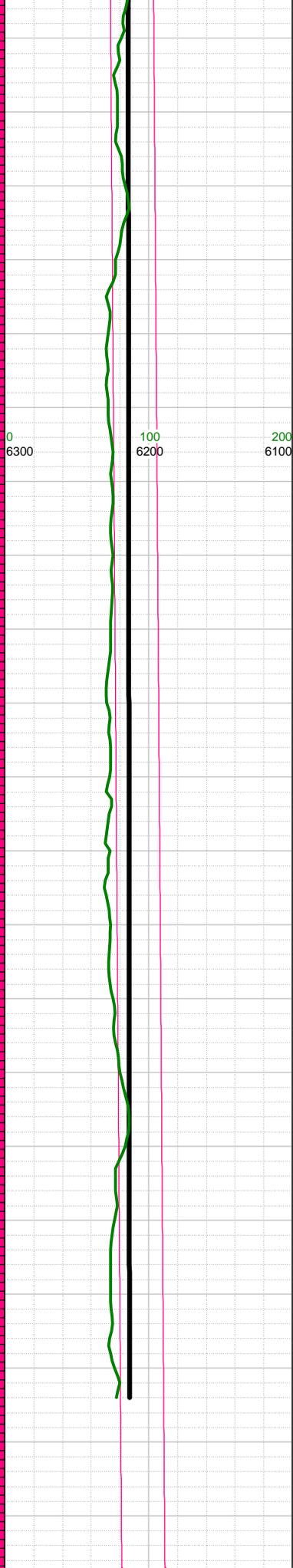
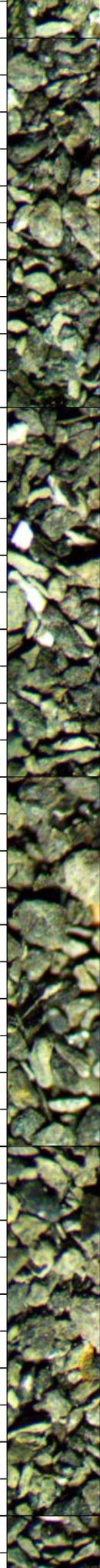
-10400 MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, v calc, sl arg; CHK: med-dk gy-brn, sft-sbfrm, sbbly, mot, v calc, rthy lstr, tr speckled w/foram, mod fos frag, v bri cut flor w/streaming, v bri lt blu res cut

-10450 MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, v calc, sl arg; CHK: med-dk gy-brn, sft-sbfrm, sbbly, mot, v calc, rthy lstr, tr speckled w/foram, mod fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-10500 CHK: med-dk gy-blk, sft-sbfrm, sbbly, mot, v calc, rthy lstr, mod speckled w/foram; MARL: dk gy-brn, sbbly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-10550 CHK: lt-med gy-brn, sft-sbfrm, sbbly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

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-10660  
-10670  
-10680  
-10690  
-10700  
-10710  
-10720  
-10730  
-10740  
-10750



89.7, AZM  
186.8, TVD  
6214.22

-10600 WT 9.8,  
VIS 34

-10638 INC  
90.9, AZM  
188.1, TVD  
6213.72

-10700 WT 9.8,  
VIS 34

-10734 INC  
89.6, AZM 188,  
TVD 6213.3

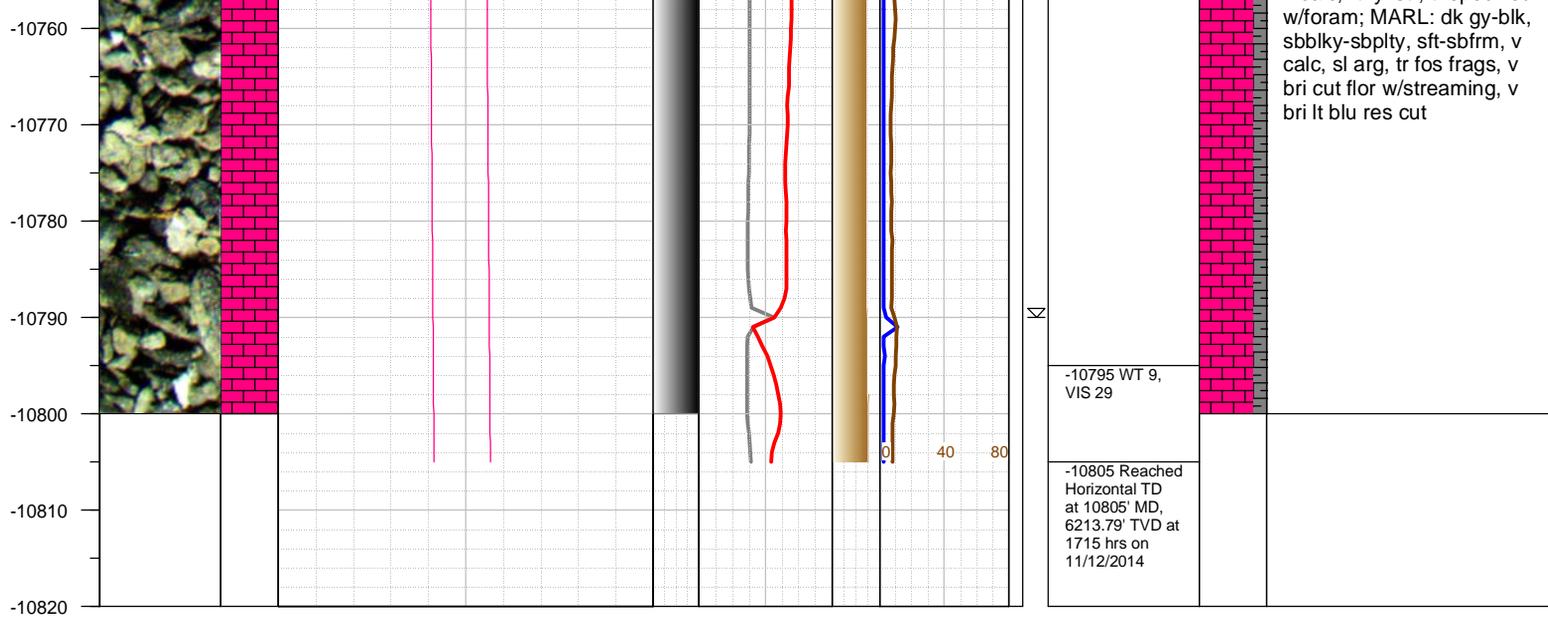
-10600 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, mod fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-10650 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-10700 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri lt blu res cut

-10750 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled w/foram; MARL: dk gy-blk, sbbkly-sbply, sft-sbfrm, v calc, sl arg, tr fos frags, v bri cut flor w/streaming, v bri med blu res cut

-10800 CHK: lt-med gy-brn, sft-sbfrm, sbbkly, mot, v calc, rthy lstr, tr speckled



TOTAL DEPTH = 10805'

Thank you for using Earth Science Agency